XI HAY

ΒΙΒΛΙΟΘΗΚΗ ΑΡΧΑΙΟΛΟΓΙΚΟΥ
ΜΟΥΣΕΙΟΥ ΘΕΣΣΑΛΟΝΙΚΗΣ
Ἀριθ. 1542
Ἡμερομ. εἰσαγωγῆς Ἰούλιος 75

LATE ROMAN POTTERY

LATE ROMAN POTTERY

BY

J. W. HAYES

THE BRITISH SCHOOL AT ROME
LONDON
1972

Published by the
BRITISH SCHOOL AT ROME
1 Lowther Gardens, Exhibition Road
London S W 7

©
THE BRITISH SCHOOL AT ROME
1972

Printed in Great Britain by W. Heffer and SonsLtd Cambridge

To

JOCELYN TOYNBEE

CONTENTS

Preface		*page* xi
List of text figures		xiii
List of maps		xiv
List of plates		xv
Select bibliography and abbreviations		xix
Notes		xxvii
I	INTRODUCTION	1
	History of the study of Late Roman pottery	2
	The background: early Roman wares	8
II	AFRICAN RED SLIP WARE	13
	Catalogue of vessel types	18
	Relief decoration	211
	Stamped decoration	217
	Styles A–E(iii)	218
	Stamp types	222
	Catalogue of stamps	229
	Various decoration	281
	Artistic connections	283
	Fabrics	287
	Manufacture	292
III	OTHER AFRICAN WARES	300
	Tripolitanian Red Slip Ware	304
IV	AFRICAN LAMPS	310
	'Tripolitanian' lamps	314
V	ÇANDARLI WARE	316
	Catalogue of vessel types	318

CONTENTS

I	'LATE ROMAN C' WARE	323
	Fabric and techniques of manufacture	323
	Catalogue of vessel types	325
	Stamped decoration: Groups I–III	346
	Stamp motifs	347
	Catalogue of stamps	350
	Distribution	368
	Relationship to Çandarli ware	369
	Probable centres of production	369
VII	CYPRIOT RED SLIP WARE	371
	Fabric	371
	Forms and decoration	372
	Catalogue of vessel types	372
	Distribution and source	385
VIII	EGYPTIAN RED SLIP WARES	387
	Egyptian 'A' ('Coptic Red Slip Ware')	387
	Catalogue of vessel types	389
	Stamped decoration	395
	Distribution	397
	Related fabrics	397
	Egyptian 'B'	397
	Egyptian 'C' ('Imitation Late B')	399
IX	GAULISH 'T.S. GRISE'	402
X	OTHER LATE ROMAN WARES	405
	Macedonian 'T.S. grise'	405
	Athenian ware	407
	Asia Minor fabrics	408
	Palestinian wares	410
	Relief wares	411
	Painted wares	412
XI	DISTRIBUTION	414
XII	CONCLUSION	425

CONTENTS

Appendix	1	Late Roman pottery: Site bibliography	428
	2	African Red Slip Ware: Concordance of vessel forms	446
	3	Late Roman pottery: Concordance of stamp types on main wares	449

Maps: Series	A	1–18	Distribution by sites	453
	B	19–36	Approximate main areas of distribution	462
	C	37–40	Site locations	465

Plates: I–XXIII *at end of book*

Index 471

PREFACE

THIS volume is based on a PhD thesis with the title 'Late Roman Pottery in the Mediterranean', submitted to the University of Cambridge in 1964. The original text has been completely reworked and considerably enlarged for publication, though the fundamental conclusions remain virtually unchanged. New material has been added, but in substance the text which follows represents the fruits of work done between 1960 and 1964, mainly at the British School at Athens and in the Athenian Agora. The present version was written in Cambridge and Toronto during 1968 and the early months of 1969, with a few subsequent alterations and additions, which appear in square brackets in the text.

In a work as broad-ranging as this many acknowledgments are due. My first thanks go to Prof. J. M. C. Toynbee, who first encouraged me to study the subject, and, in the role of supervisor and friend, has over the years given me valuable advice on the wider aspects of Late Roman art. Equal thanks are due to Prof. Henry S. Robinson, who introduced me (in the Athenian Agora) to the wares here studied, generously made over to me a large part of his own publication material, and, in his role as Director of the American School of Classical Studies (Athens), over a period of years facilitated my studies in Athens and Corinth. A particular debt of gratitude goes to Prof. Homer A. Thompson and the staff of the Agora excavations, who from the start have offered me every facility and have accepted me as one of their own number. Much of my work was done as a Student of the British School at Athens; I warmly thank the staff of the School, and in particular its successive Directors, Mr M. S. F. Hood and Mr A. H. S. Megaw, for all their help and encouragement.

The following have also contributed to this volume, and are thanked for their assistance:

In Greece, the directors and members of the Greek Archaeological Service, the American School, the French School and the German Institute, in particular the late S. Charitonidis, G. Daux, G. Dontas, E. Hatzidakis, V. Kallipolitis, Prof. E. Kunze, Prof. D. Pallis, Ph. Petsas;

In Turkey, Dr N. Fıratlı, Mr M. R. E. Gough and the staff of the British Institute at Ankara, Prof. G. M. A. Hanfmann, Prof. R. M. Harrison, Dr J. Schäfer;

In Cyprus, Dr V. Karageorghis, Mr K. Nikolaou and the staff of the Department of Antiquities, and also Dr A. I. Dikigoropoulos and Mr A. H. S. Megaw;

In Jordan, the late Dr A. Dajani and his staff, and Mr P. J. Parr;

In Egypt, Dr J. Engemann;

In Libya, the late Prof. R. G. Goodchild, Prof. A. di Vita, Dr M. S. Ayoub, and various members of the Department of Antiquities;

In Tunisia, M. Iakoub;

In Malta, the staff of the National Museum;

In Italy, Mr J. B. Ward Perkins, Dr M. A. Cotton, and the staff of the British School at Rome, and also Prof. F. E. Brown, A. Carandini, Prof. M. F. Squarciapino, Prof. A. Stenico.

I also wish to thank the many museum directors and curators in Europe and America who have assisted me in my work, in particular Miss A. Macdonald (London Museum), the staff of various departments of the British Museum, Prof. H. Klumbach (Mainz), M. P. Devambez (Louvre), Dr J. H. C. Kern (Leiden), Mrs H. Salskov Roberts (Copenhagen) and Miss L. Shier (Ann Arbor).

For general advice and assistance, I am much indebted to Mr L. Benaki, Prof. R. M. Cook, Prof. H. Comfort and Dr J. W. Salomonson. Dr K. M. Kenyon has kindly shown me her finds from Sabratha; Mr P. Addyman, Lady Brogan, Mr C. M. Daniels, Mr W. G. Simpson and Dr D. J. Smith have made available the material from their site-surveys in Libya and Tunisia. Prof. J. M. Cook and Mr M. S. F. Hood have shown me the material from their site-surveys in western Turkey and Crete. Mr R. B. K. Stevenson has loaned the notebooks of the Great Palace excavations in Istanbul. Prof. A. C. Thomas has shared with me his knowledge of finds from British sites.

The following bodies provided the financial support which made my studies possible: Ministry of Education (now Dept. of Education and Science) (1960–3), the Classics Faculty Board, Cambridge (Walston Studentship, 1960–1), Leverhulme Research Awards (1963–4), the University of Newcastle upon Tyne (Sir James Knott Fellowship, 1964–6). I express my sincere thanks to all of these, and also to those institutions and excavation directors who have at various times offered financial support in order to allow me to work on their material.

Institutions and individuals who have supplied photographs and have permitted me to reproduce them here are duly noted in the List of Plates.

All the line-drawings are my own work (from drawings and rubbings made on the spot), with the exception of some of the Emporio (Chios) pieces, the Kornos Cave (Cyprus) dishes, and the Abu Mena items, which were drawn from profiles kindly supplied by Mr J. Boardman, Dr H. W. Catling and Dr J. Engemann respectively. The final typescript was prepared by Miss P. D'Castro.

My final thanks go to Mr J. B. Ward Perkins, Director of the British School at Rome, who has always shown an active interest in my work, and to the Committee of the School, for sponsoring the publication of this study; equally to Prof. D. E. Strong, who has undertaken on behalf of the School the onerous task of editing it and seeing it through the press.

The University of Newcastle upon Tyne has provided a grant towards the cost of publication of this volume.

LIST OF TEXT FIGURES

FIG.		*beginning*
	AFRICAN RED SLIP WARE	
1–37	Type series	*page* 19
38–57	Stamps	230
58–62	OTHER AFRICAN WARES	301
	including Tripolitanian	306
63–64	ÇANDARLI WARE	318
	'LATE ROMAN C' WARE	
65–71	Type series	325
72–79	Stamps	350
80–84	CYPRIOT RED SLIP WARE	374
85–89	EGYPTIAN RED SLIP WARES	390
90–93	OTHER LATE ROMAN WARES	406

LIST OF MAPS

following text

SERIES A	DISTRIBUTION BY SITES	
1–12	AFRICAN R.S. WARE	*page* 453
13	ÇANDARLI WARE	459
14–16	'LATE ROMAN C' WARE	459
17	CYPRIOT R.S. WARE	461
18	EGYPTIAN R.S. 'A' WARE	461
SERIES B	APPROXIMATE MAIN AREAS OF DISTRIBUTION	
19–30	AFRICAN R.S. WARE	462
31	ÇANDARLI R.S. WARE	464
32–34	'LATE ROMAN C' WARE	464
35	GAULISH 'T.S. GRISE' AND CYPRIOT R.S. WARE	464
36	EGYPTIAN R.S. WARE	464
SERIES C 37–40	SITE LOCATIONS	465

LIST OF PLATES

with acknowledgments

PLATE		FORM	
			AFRICAN RED SLIP WARE: EARLY FORMS
I	*a*	3.3	Kunsthistorisches Museum, Vienna Vienna IV 1318
	b	35.1	Musée du Louvre, Paris Louvre AO 6640 *bis* Photo: M. Chuzeville
	c	24.1	Soprintendenza alle Antichità, Ostia Ostia 4670 Photo: M. F. Squarciapino
	d	25.1	Soprintendenza alle Antichità, Ostia Ostia 4669
			AFRICAN RED SLIP WARE: EARLY CLOSED FORMS
II	*a*	122.1	Rijksmuseum van Oudheden, Leiden Leiden H& 10
	b	122.3	Leiden HL 1
	c	123.5	Royal Ontario Museum, Toronto Toronto 926.50.10
	d	131.1	Rijksmuseum van Oudheden, Leiden Leiden HP 47
III	*a*	134.2	Rijksmuseum van Oudheden, Leiden Leiden H II 27
	b	135.2	Leiden H III Z 44
	c	135.5	Leiden HMM 46
	d	136.2	Leiden H III Z 45
IV	*a*	137.4	Rijksmuseum van Oudheden, Leiden Leiden HP 48
	b	137.6	Leiden H II 26
	c	138.2	Leiden HA 30
	d	139.1	Leiden HA 29
V	*a*	140.3	Rijksmuseum van Oudheden, Leiden Leiden H III Z 46
	b	144.1	Leiden HNN 174
	c	147.3	Hispanic Society of America, New York Hisp. Soc. E 307 Courtesy of the Hispanic Society of America

LIST OF PLATES

PLATE		FORM	
VI	*a*	151.1	Fogg Art Museum, Harvard University, Cambridge, Mass. Fogg CC 321 Courtesy of the Fogg Art Museum, Harvard University, Pfeiffer-Hartwell Collection
	b	153.1	British Museum, London BM W.T. 558 Trustees of the British Museum
	c	154.1	Metropolitan Museum, New York Met. 17.194.864 The Metropolitan Museum of Art: Gift of J. Pierpont Morgan, 1917

AFRICAN RED SLIP WARE: CLOSED FORMS

VII	*a*	156.1	Rijksmuseum van Oudheden, Leiden Leiden HA 15
	b	158.6	Leiden HG 12
	c	160.1	British Museum, London BM MSC. 2181 Trustees of the British Museum
	d	171.49	Rijksmuseum van Oudheden, Leiden Leiden I 1924/2.12

AFRICAN SLIP WARE: APPLIQUÉ, EARLY STYLE

VIII		171.39	Rheinisches Landesmuseum, Trier Trier EV 1943.22
IX	*a*	172.13	Musée du Louvre, Paris Louvre AO 6636 Photo: M. Chuzeville
	b	173.1	Louvre AO 6617 Photo: M. Chuzeville
X	*a*	174.11	Musée du Louvre, Paris Louvre AO 6563 Photo: M. Chuzeville
	b	175.1	Yale University Art Gallery, New Haven Yale 1913.546 Yale University Art Gallery: Gift of Rebecca Darlington Stoddard

AFRICAN RED SLIP WARE: APPLIQUÉ, LATE STYLE

XI	*a*	52.10	Kunsthistorisches Museum, Vienna Vienna IV 2001
	b	54.1	Soprintendenza alle Antichità, Ostia Ostia 4675 and 4677

AFRICAN RED SLIP WARE: STAMPED, STYLE A(i)–(ii)

XII	*a*	59.1 61.1	Germa, Royal Tomb 5 Mr C. M. Daniels
	b	61.4 67.1	London Museum, Kensington, London LM Layton Coll. P96 and P93 Trustees of the London Museum

PLATE		FORM	
XIII	*a*	67.1	London Museum, Kensington, London LM Layton Coll. P93 Trustees of the London Museum
	b	67.9	British Museum, London BM 1928.4–13.8 Trustees of the British Museum

AFRICAN RED SLIP WARE: STAMPED, STYLE A(iii)

XIV	*a*	61.33	London Museum, Kensington, London LM Layton Coll. P95 Trustees of the London Museum
	b	64.1	British Museum, London BM 1928.4–13.9 Trustees of the British Museum
XV	*a*	61.29	Römisch-germanisches Zentralmuseum, Mainz Mainz O 13850
	b	61.33 61.35	London Museum, Kensington, London LM Layton Coll. P95 and P98 Trustees of the London Museum

AFRICAN RED SLIP WARE: STAMPED, STYLE D

XVI	*a*	75.1	Römisch-germanisches Zentralmuseum, Mainz Mainz O 7046
	b	83.2	Benaki Museum, Athens Benaki 12436
	c	82.5	Römisch-germanisches Zentralmuseum, Mainz Mainz O 9088

AFRICAN RED SLIP WARE: STAMPED WARE STYLE E(ii)

XVII	*a*	104.3	Römisches-germanisches Zentralmuseum, Mainz Mainz O 13849
	b	104.4	Mainz O 9086
XVIII	*a*		British Museum, London BM 88.10–8.4 Trustees of the British Museum
	b	104.2	BM 1928.4–13.10 Trustees of the British Museum
XIX	*a*		Römisch-germanisches Zentralmuseum, Mainz Mainz O 9087
	b	104.16	Victoria & Albert Museum, London V & A 476.1891

AFRICAN RED SLIP WARE

XX		170.1	Rijksmuseum van Oudheden, Leiden Leiden K 1931/6 28

LIST OF PLATES

PLATE

AFRICAN LAMPS AND 'LATE ROMAN C' WARE

XXI *a* Museum of Classical Archaeology, Cambridge
Lamps, Types IIA and B Photo: J. W. Hayes
b Agora Excavations, Athens
Athens Agora P 27047 (Group I)
P 8646 (Group IIA)
P 27067 (Group IIA)
P 27027 (Group III, early)

VARIOUS WARES

XXII *a* British Museum, London
'Oinophoros' (Knidian?)
BM 49.6–20.8 Trustees of the British Museum
b Corinthian relief bowl
BM 1933.6–13.1 Trustees of the British Museum

XXIII *a* Sardis excavations
Sardis P 67.2(7284) Courtesy of Archaeological Exploration of Sardis
b Delphi Museum, French excavations
Central Greek painted ware École Française d'Athènes

SELECT BIBLIOGRAPHY AND ABBREVIATIONS

ADAMS (1962) W. Y. Adams, 'An Introductory Classification of Christian Nubian Pottery', *Kush* (Journal of the Sudan Antiquities Service) x (1962) 245–88.

ADROER (1963) A. M. Adroer, 'La cerámica romana procedente de una necrópolis de Barcelona', *Riv. st. lig.* xxix (1963) 99–124.

Albintimilium i See Lamboglia (1950).

ALLAIS (1957) Y. Allais, 'Note sur quelques tessons de Djemila', *Libyca* v (1957) 37–42.

ALLAIS (1959) Y. Allais, 'Plat de Djemila à décor mythologique', *Libyca* vii (1959) 43–58.

ALLAIS (1960) Y. Allais, 'Note complémentaire sur des plats au décor mythologique', *Libyca* viii.2 (1960) 125–30.

ALMAGRO AND LAMBOGLIA (1959) M. Almagro and N. Lamboglia, 'La estratigrafía del Decumano A de Ampurias', *Ampurias* xxi (1959) 1–28.

Antioch iv.1 See Waagé (1948).

AURIGEMMA (1958) S. Aurigemma, *Un sepolcreto punico-romano sotto il 'Forte della Vite' o 'Forte Nord-Ouest' in Tripoli, Libia* (Reports and Monographs of the Department of Antiquities in Tripoli, 4; Tripoli, 1958).

BAGATTI (1953) P. B. Bagatti, ' "Terre Sigillate" in Palestina nei secoli V e VI', *Faenza* xxxix (1953) 70–75, pls. XVII–XVIII.

BARADEZ (1961) J. Baradez, 'Nouvelles fouilles à Tipasa', *Libyca (Archéologie-Epigraphie)* ix.1 (1961) 7–199.

BARADEZ (1967) J. Baradez, 'Grands plats chrétiens de Tipasa: céramique africaine orangée et "sigillata chiara" ', *MEFR* lxxix (1967) 1, pp. 231–68.

BAUR, *Cat. Stoddard Coll.* P. V. C. Baur, *Catalogue of the Rebecca Darlington Stoddard Collection of Greek and Italian Vases in Yale University* (New Haven, 1922).

BERTHIER AND MARTIN (1948) A. Berthier and M. Martin, 'Note sur un plat orné représentant Adam et Eve', *Recueil des notices et mémoires de la société archéologique du département de Constantine* lxvi (1948) 125–8, with 1 pl.

BRANTS (1913) J. Brants, *Antieke Terra-cotta Lampen uit het Rijksmuseum van Oudheden te Leiden* (Leiden, 1913).

CAMPS (1955) G. Camps, 'La nécropole de Draria-el-Achour', *Libyca* iii (1955) 225–64.

Cat. Alaoui (1897), (1910), (1922) Various authors, *Catalogue du Musée Alaoui* (Paris, 1897); Supplément (Paris, 1910); 2e Supplément (Paris, 1922).

CHARLESTON (1955) R. J. Charleston, *Roman Pottery* (London, 1955).

CLERC AND D'AGNEL (1904) M. Clerc and G. A. d'Agnel, *Découvertes archéologiques à Marseille* (Marseille, 1904).

COMFORT (1940) H. Comfort, 'Terra Sigillata', in Pauly, Wissowa and Kroll, *Real-Encyclopädie der classischen Altertumswissenschaft,* Supplementband vii (Stuttgart, 1940) cols. 1295–1352.

COX (1949) D. H. Cox, *The Excavations at Dura-Europos, Final Report* iv, part 1, fasc. 2, *The Greek and Roman Pottery* (New Haven, 1949).

ČREMOŠNIK (1962) I. Čremošnik, 'Nalaz terre sigillate chiare iz Višića (Čapljina) (Der Fund von Terra sigillata chiara aus Višići)', *Glasnik Sarajevu* xvii (1962) 115–40.

ČREMOŠNIK (1966) I. Čremošnik, 'Funde von Sigillaten mediterraner Toepfereien in Bosnien und der Hercegovina', *Archaeologia Iugoslavica* vii (1966) 41–51, with 6 pls.

CURLE (1923) A. O. Curle, *The Treasure of Traprain: A Scottish Hoard of Roman Silver Plate* (Glasgow, 1923).

DALTON (1901) O. M. Dalton, *Catalogue of Early Christian Antiquities in the British Museum* (London, 1901).

DÉCHELETTE (1904) J. Déchelette, *Les vases céramiques ornés de la Gaule romaine* (2 vols., Paris, 1904).

DELATTRE (1888) A.-L. Delattre, *Revue de l'art chrétien* xxxviii (1888) 219–21.

DELATTRE (1893) Delattre, *id.* xliii (1893) 39–40.

DELGADO (1967) M. Delgado, 'Terra sigillata clara de Conimbriga,' *Conímbriga* vi (1967) 47–128.

DELOUGAZ (1960) P. Delougaz and R. C. Haines, *A Byzantine Church at Khirbat al-Karak* (University of Chicago Oriental Institute Publications, vol. 85; Chicago, 1960). Pottery sections by Delougaz.

DE WAAL (1904) A. de Waal, 'Altchristliche Thonschüsseln', *Römische Quartalschrift* xviii (1904) 308–21.

DODD (1961) E. C. Dodd, *Byzantine Silver Stamps* (Dumbarton Oaks Studies, no. 7; Washington, D.C., 1961).

DREXEL (1909) F. Drexel, 'Alexandrinische Silbergefässe der Kaiserzeit', *BJ* cxviii (1909) 176–235.

Dura iv.1.2 See Cox (1949).

EMERY AND KIRWAN (1938) W. B. Emery and L. P. Kirwan, *The Royal Tombs of Ballana and Qustul* (Mission archéologique de Nubie, 1929–1934; Cairo, 1938).

ESTEVA CRUAÑAS (1962) L. Esteva Cruañas, 'Ceramica romana de época tardia hallada en San Felíu de Guixols (Gerona)', *Boletín del Seminario de Estudios de Arte y Arqueología (Valladolid)* xxviii (1962) 49ff.

ETTLINGER, *Schaan* E. Ettlinger, 'Die Kleinfunde aus dem spätrömischen Kastell Schaan', *Jahrbuch des Historischen Vereins für das Fürstentum Liechtenstein* lix (1959) 229–99, with 13 pls.

FAIDER-FEYTMANS, *Musée de Mariemont* G. Faider-Feytmans *(et al.), Les antiquités égyptiennes, grecques, étrusques, romaines et gallo-romaines du Musée de Mariemont* (Bruxelles, 1952).

FÉVRIER (1963) P.-A. Février, 'Remarques préliminaires sur la céramique romaine d'Afrique du Nord', *Riv. st. lig.* xxix (1963) 125–36.

FÉVRIER (1965) P.-A. Février, *Fouilles de Sétif: les basiliques chrétiennes du quartier nord-ouest* (Paris, 1965).

FOUET (1961) G. Fouet, 'Céramiques estampées du IVe siècle dans la Villa de Montmaurin (Haute-Garonne)', *Ogam* xiii (=*Celticum* i) (1961) 271–85, pls. LIII-LVII.

FREMERSDORF (1958) F. Fremersdorf, 'Nordafrikanische Terra Sigillata aus Köln', *Kölner Jahrbuch für Vor- und Frühgeschichte* iii (1958) 11–19.

FUHRMANN (1940) H. Fuhrmann, 'Studien zu den Consulardiptychen verwandten Denkmälern, ii, Tonerne Missoria aus der Zeit der Tetrarchie', *Röm. Mitt.* lv (1940) 92–99.

HELLSTRÖM (1965) P. Hellström, *Labraunda* ii.1, *Pottery of classical and later date, terracotta lamps and glass* (Lund, 1965).

HOLWERDA (1936) J. H. Holwerda, *Het Laat-grieksche en Romeinsche gebruiksaardewerk uit het Middellandsche-zee-gebied in het Rijksmuseum van Oudheden te Leiden* ('s Gravenhage, 1936).

IVÁNYI (1935) D. Iványi, *Die pannonischen Lampen: eine typologisch-chronologische Übersicht* (Dissertationes Pannonicae, ser. 2, no. 2; Budapest, 1935).

JODIN AND PONSICH (1960) A. Jodin and M. Ponsich, 'La céramique estampée du Maroc romain', *Bull. d'arch. marocaine* iv (1960) 287–318.

JONES (1950) F. F. Jones, 'The Pottery', in *Excavations at Gözlü Kule, Tarsus* i, *The Hellenistic and Roman Periods* (Princeton, 1950).

KANTOR (1958) H. J. Kantor, 'The Pottery', in *Soundings at Tell Fakhariyah* (University of Chicago Oriental Institute Publications, vol. 79; Chicago, 1958).

KERN (1958) J. H. C. Kern, 'A Roman Terra Sigillata Dish from Tunisia, in Leyden', *Mnemosyne* 4 ser. xi (1958) 152–6, pls. I–II.

KNIPOVICH (1929) T. N. Knipowitsch, *Untersuchungen zur Keramik römischer Zeit aus den Griechenstädten an der Nordkuste des Schwarzen Meeres* i, *Die Keramik römischer Zeit aus Olbia in der Sammlung der Eremitage* (Materialien zur römisch-germanischen Keramik, 4; Frankfurt a. M., 1929).

KNIPOVICH (1952) T. N. Knipovich, 'Red-glazed pottery of the first centuries A.D. from the excavations of the Bosporos Expedition, 1935–1940', *Materiali* 25 (1952) 289–326 (in Russian).

KÜBLER (1931) K. Kübler, 'Mitteilungen aus dem Kerameikos, v: Spätantike Stempelkeramik', *Ath. Mitt.* lvi (1931) 75–86.

LAMBOGLIA (1941) N. Lamboglia, 'Terra sigillata chiara', *Rivista Ingauna e Intemilia* = *Riv. st. lig.* vii (1941) 7–22.

LAMBOGLIA (1950) N. Lamboglia, *Gli scavi di Albintimilium e la cronologia della ceramica romana* i, *Campagne di scavo* 1938–1940 (Bordighera, 1950).

LAMBOGLIA (1958), (1963) N. Lamboglia, 'Nuove osservazioni sulla "terra sigillata chiara" ', *Riv. st. lig.* xxiv (1958) 257–330; xxix (1963) 145–212.

LECLERCQ (1907) H. Leclercq, *Manuel d'archéologie chrétienne* (2 vols., Paris, 1907).

LOESCHCKE (1912) S. Loeschcke, 'Sigillata-Töpfereien in Tschandarli', *Ath. Mitt.* xxxvii (1912) 344–407.

MENZEL (1954) H. Menzel, *Antike Lampen* (Römisch-germanisches Zentralmuseum zu Mainz, Katalog 15, 1954).

MERLIN (1913) A. Merlin, 'Note sur un plat à sujet figuré trouvé en Tunisie', *BAC*, 1913, pp. 324–6.

Mildenhall Treasure *The Mildenhall Treasure: A Handbook* (British Museum, London, 2nd ed., 1955).

MOND AND MYERS (1940). Sir Robert Mond and O. H. Myers, *Temples of Armant: A Preliminary Survey* (London, 1940).

MOUCHOT (1963) D. Mouchot, 'Quelques vases de céramique "sigillée claire" trouvés à Cimiez', *Riv. st. lig.* xxix (1963) 137–44.

MOURET (1927) F. Mouret, *CVA France* fasc. 6, *Collection Mouret: Fouilles d'Ensérune* (1927).

Nessana i T. J. C. Baly, 'The Pottery', in (ed. H. D. Colt) *Excavations at Nessana* i (London, 1962).

Ostia i Various authors, *Ostia* i, *Le Terme del Nuotatore: scavo dell'ambiente IV* (*Studi Miscellanei* 13; Rome, 1969). Relevant sections by A. Carandini.

OSWALD AND PRYCE F. Oswald and T. D. Pryce, *An Introduction to the Study of Terra Sigillata* (London, 1920).

PAGENSTECHER (1909) R. Pagenstecher, 'Die Calenische Reliefkeramik', (*JdI Ergänzungsheft* 8, 1909).

PAGENSTECHER (1912) R. Pagenstecher, 'Calena', *JdI* xxvii (1912) 146–73.

PALLARÉS (1959: 1) F. Pallarés, 'Terra Sigillata Clara de tipo "A" decorada en Valencia y Ventimiglia', *Riv. st. lig.* xxv (1959) 125–9.

PALLARÉS (1959: 2) F. Pallarés, 'Notas complementarias sobre terra sigillata clara: 1. La forma 1 en sigillata clara B. 2. La forma 41 en sigillata clara A', *Riv. st. lig.* xxv (1959) 232–5.

PALLARÉS (1960) F. Pallarés Salvador, 'Notas complementarias sobre terra sigillata clara: Sigillata Clara A en el Museo de Copenhague', *Riv. st. lig.* xxvi (1960) 264–88.

PALOL SALELLAS (1949) P. de Palol Salellas, 'La cerámica estampada romano-cristiana', *Crónica del IV Congreso Arqueológico del Sudeste Español (Elche, 1948)* (Cartagena, 1949) 450–68.

PERLZWEIG (1961) J. Perlzweig, *The Athenian Agora* vii, *Lamps of the Roman Period* (Princeton, 1961).

POPESCU (1965) E. Popescu, 'Ceramica romană tîrzie cu decor ştampilat descoperită la Histria', *Studii şi cercetări de istorie veche* xvi.4 (1965) 695–724.

POSAC MON (1964) C. Posac Mon, 'Ceramica estampada de Ceuta', *Boletín del Seminario de Estudios de Arte y Arqueología (Valladolid)* xxx (1964) 320–8.

PRESEDO VELO (1964) F. J. Presedo Velo, *La fortaleza nubia de Cheikh-Daud* (Memorias de la Misión Arqueológica en Nubia, iv; Madrid, 1964).

RADFORD (1956) C. A. Ralegh Radford, 'Imported pottery found at Tintagel, Cornwall', in (ed. D. B. Harden) *Dark-Age Britain: Studies presented to E. T. Leeds* (London, 1956) 59–70.

RIGOIR (1960) J. Rigoir, *La céramique paléochrétienne sigillée grise (= Provence historique* x, fasc. 42 (1960) 1–93).

RIGOIR (1968) J. Rigoir, 'Les sigillées paléochrétiennes grises et orangées', *Gallia* xxvi.1 (1968) 177–244.

ROBINSON (1959) H. S. Robinson, *The Athenian Agora* v, *Pottery of the Roman Period, Chronology* (Princeton, 1959).

ROLLAND (1951) H. Rolland, *Fouilles de Saint-Blaise (Bouches-du-Rhône) (Gallia* suppl. iii, Paris, 1951).

ROLLAND (1956) H. Rolland, *Fouilles de Saint-Blaise,* 1951–1956 *(Gallia* suppl. vii, Paris, 1956).

RUSSELL CORTEZ (1951) F. Russell Cortez, ' "Terra Sigillata" tardia encontrada em Portugal', *Beira Alta* x (Viseu, 1951) 3–69.

SALOMONSON (1960) J. W. Salomonson, 'The Fancy Dress Banquet: Attempt at interpreting a Roman mosaic from El Djem', *Bull. van de Antieke Beschaving* xxxv (1960) 25–55.

SALOMONSON (1962) J. W. Salomonson, 'Late-Roman Earthenware with Relief Decoration found in Northern Africa and Egypt', *Oudheidkundige Mededelingen . . . Leiden* xliii (1962) 53–95, pls. XI–XXXII.

SALOMONSON (1964) J. W. Salomonson, 'Un plat de terre cuite trouvé à El Djem, pièce d'importation ou produit local?', *Cahiers de Tunisie* xii, nos. 45–46 (1964) 107–27. (Shortened version of 1962 article.)

SALOMONSON (1968) J. W. Salomonson, 'Etudes sur la céramique romaine d'Afrique. Sigillée claire et céramique commune de Henchir el Ouiba (Raqqada) en Tunisie Centrale', *BABesch* xliii (1968) 80–145.

SALOMONSON (1969) J. W. Salomonson, 'Spätrömische rote Tonware mit Reliefverzierung aus nordafrikanischen Werkstätten. Entwicklungsgeschichtliche Untersuchungen zur reliefgeschmückten Terra Sigillata Chiara "C" ', *BABesch* xliv (1969) 4–109.

Samaria-Sebaste iii J. W. Crowfoot *et al., Samaria-Sebaste* iii, *The Objects from Samaria* (London, 1957).

SCE iv.3 O. Vessberg and A. Westholm, *The Swedish Cyprus Expedition* iv, part 3, *The Hellenistic and Roman Periods in Cyprus* (Stockholm, 1956).

Sieglin Exped. ii.3 R. Pagenstecher, 'Die Gefässe in Stein und Ton, Knochenschnitzereien', *Expedition Ernst von Sieglin, Ausgrabungen in Alexandria* Bd. II, *Die griechische-ägyptische Sammlung Ernst von Sieglin* 3. Teil (Leipzig, 1913).

SQUARCIAPINO (1951) M. F. Squarciapino, 'Note per lo studio del vasellame fittili romano: frammenti ostiensi della c.d. ceramica tarda *A*', *Rendic. Accad. naz. Lincei, Classe di scienze morali, storiche e filologiche* 8 ser. vi (1951) 133–43.

STERN (1968) E. M. Stern, 'Note analytique sur des tessons de sigillée claire D ramassées à Henchir es Srira et Sidi Aich', *BABesch* xliii (1968) 146–54.

STRONG (1966) D. E. Strong, *Greek and Roman Gold and Silver Plate* (London, 1966).

Tarsus i See Jones (1950).

Temples of Armant See Mond and Myers (1940).

THOMAS (1959) A. C. Thomas, 'Imported pottery in Dark-Age Western Britain', *Medieval Archaeology* iii (1959) 89–111.

TOYNBEE (1957) J. M. C. Toynbee, 'Fragments of Italian Red-gloss Ware from the *Domus Aurea,* Rome', *Latomus* xvi (1957) 18–22, pls. I–V.

Tunisian Exhibition (J. W. Salomonson,) *Romeinse Mozaïeken uit Tunesië* (Exhibition: Rijksmuseum van Oudheden, Leiden, 21/12/1963–16/3/1964). Parallel editions in German (1964), etc. American ed. (with revised numbering, shortened text, etc.): *Tunisian Mosaics* (Smithsonian Institution Traveling Exhibition, 1967–1969).

VERMASEREN AND VAN ESSEN (1965) M. J. Vermaseren and C. C. Van Essen, *The Excavations in the Mithraeum of the Church of Santa Prisca in Rome* (Leiden, 1965).

VOLBACH AND HIRMER (1961) W. F. Volbach and M. Hirmer, *Early Christian Art* (English eds., London and New York, 1961).

WAAGÉ (1933) F. O. Waagé, 'The American Excavations in the Athenian Agora, First Report: The Roman and Byzantine Pottery', *Hesperia* ii (1933) 279–328, pls. VIII–X.

WAAGÉ (1948) F. O. Waagé, 'Hellenistic and Roman Tableware of North Syria', in *Antioch-on-the-Orontes* iv, part i, *Ceramics and Islamic Coins* 1–60, pls. I–XI.

WACE (1948) A. J. B. Wace, 'Late Roman Pottery and Plate', *Bull. soc. royale d'archéologie d'Alexandrie* xxxvii (1948) 47–57.

WALTERS (1908) H. B. Walters, *Catalogue of the Roman Pottery in the Department of Antiquities, British Museum* (London, 1908).

WINLOCK AND CRUM (1926) H. E. Winlock and W. E. Crum, *The Monastery of Epiphanius at Thebes* i (Publications of the Metropolitan Museum of Art Egyptian Expedition, iii; New York, 1926).

WULFF (1909) O. Wulff, *Altchristliche Bildwerke* (Königliche Museen zu Berlin: Beschreibung der Bildwerke der christlichen Epochen (2nd ed.) iii, Altchristliche und mittelalterliche byzantinische und italienische Bildwerke, Teil 1; Berlin, 1909).

ZEISS (1933) H. Zeiss, 'Spätrömische stempelverzierte Keramik aus Portugal und Spanien', in *Homenagem a Martins Sarmento* (Guimarães, Portugal, 1933) 466–72.

ZINGERLE (1907) J. Zingerle, 'Tonschüssel aus Carnuntum', *JÖAI* x (1907) 330–44.

* * *

References to periodicals and series follow the system adopted in the *Journal of Hellenic Studies* and the *Annual of the British School at Athens.* Note in addition:

ADelt	*'Αρχαιολογικὸν Δελτίον.*
BABesch	*Bulletin van de Vereeniging tot Bevordering der Kennis van de Antieke Beschaving te 's Gravenhage.*
BAC	*Bulletin archéologique du Comité des travaux historiques et scientifiques.*
BJ	*Bonner Jahrbücher.*
BMCat.	British Museum Catalogue(s).
Bull. inst. arch. bulg.	*Bulletin de l'institut archéologique* = ИЗВЕСТИЯ НА АРХЕОЛОГИЧЕСКИЯ ИНСТИТУТ (Sofia).
CRAI	*Comptes rendus de l'Académie des Inscriptions et Belles-Lettres.*
DACL	(H. Leclercq) *Dictionnaire d'archéologie chrétienne et de liturgie.*
DOP	*Dumbarton Oaks Papers.*
Glasnik Sarajevu	*Glasnik Zemaljskog Muzeja u Sarajevu (Arheologija).*
ILN	*Illustrated London News.*
JÖAI	*Jahreshefte des österreichischen archäologischen Institutes.*
LAAA	*Annals of Archaeology and Anthropology* (Liverpool).
Materiali	МАТЕРИАЛЫ И ИССЛЕДОВАНИЯ ПО АРХЕОЛОГИИ СССР.
MEFR	*Mélanges d'archéologie et d'histoire* (Ecole Française de Rome).
NSc	*Notizie degli scavi.*
QDAP	*Quarterly of the Department of Antiquities for Palestine.*
RCRF Acta	*Rei Cretariae Romanae Fautorum, Acta.*
RDAC	*Report of the Department of Antiquities, Cyprus.*
Riv. st. lig.	*Rivista di studi liguri.*

NOTES

All measurements in this book, except where stated otherwise, are in centimetres. Where an object has been published without an indication of size, the dimensions are calculated on the basis of the published drawing, and are expressed in approximate terms. Where a measurement more precise than (or differing from) that previously published is given, this indicates that I have remeasured the piece personally.

Note: D. = diameter *at the top edge of the rim* (i.e. where it can most easily be measured with a ruler or diameter chart). In cases where the maximum overall diameter is specified, this is indicated by 'max. D.'. 'Est.' = estimated, 'pr.' = preserved.

In the Catalogues, etc., 'Form 1.1' indicates Form 1, catalogued item no. 1, and so on. Cross-references to other listed examples of the same form or series appear in bold type. Parentheses enclose dubious specimens; square brackets enclose references that do not cover the same range.

An asterisk (*) against a catalogued object indicates that a profile of the piece is to be found in the accompanying Figures.

The word *Type* is used both as a subordinate of *Form* and as an abbreviation of *Stamp Type*.

Any dates not specified are A.D.

T.S. = Terra Sigillata.

R.S. (Ware) = Red Slip (Ware).

I

INTRODUCTION

IT is now some fifty years since Oswald and Pryce's classic work, *An Introduction to the Study of Terra Sigillata,* first made its appearance, to provide a solid basis for the study of Roman pottery in Gaul and the northern provinces of the Roman Empire. No comparable study has yet appeared on the Mediterranean counterparts of these wares, in particular those of later Imperial times, though the groundwork has been laid by the work of, among others, Lamboglia (for the West) and Waagé (for the East). The present volume is an attempt to fill this *lacuna,* in so far as the evidence at present available permits this.

The fine tablewares produced and used in the Mediterranean provinces of the Empire between the second and the seventh century A.D., in particular the red-slipped products of North African factories and the various imitations of them which were dominant throughout the period, constitute the main subject of this study. My main emphasis is on the eastern Mediterranean region, for the Western products have already been studied in part, and my personal experience in handling them is limited. The present work thus represents an attempt to bring together the published evidence to date and such material as I have myself observed over the course of a number of years in the central and eastern Mediterranean and in various museums in northern Europe and America. The coverage is of necessity not complete, but much of the material cited has not been studied before.

The finds from the *Athenian Agora* excavations provide the largest single source of material for this study, and supply a large proportion of the available dating-evidence.[1] These are crucial for the period from the middle of the third century to the end of the fifth, which is represented by a long series of well-dated closed groups, and important for the sixth century also. For the earlier period (up to about A.D. 250), Lamboglia has surveyed most of the available dating-evidence in his study of finds from the West. For the sixth and seventh centuries the *Antioch* finds, published by Waagé, are the best single source of dating-evidence. A number of other sites are also of particular importance from the chronological standpoint: *Dura-Europos* in Syria and *Emporio* (Chios) provide fixed points; *Corinth, Istanbul* and, in the north, *Köln* have yielded useful dated groups. In Egypt, the fifth and sixth centuries are well documented by recent finds from *Abu Mena*[2] and by the

[1] The present volume and the final report on imported Roman pottery in the *Athenian Agora* series (forthcoming) should be regarded as complementing each other; for a full listing of the catalogued pieces of the wares in question from the Agora excavations, together with photographs, and for lists of Agora deposits, the reader is referred to the latter work.

[2] Principally from two deposits referred to below as the 'Cistern' group and the 'Kom' group. The former, from a cistern in the Great Basilica, is briefly noted by Engemann in *Mitt.d.a.I.Kairo* xxi (1966) 186–7; the latter comprises the finds from a cut dug through one of the main city rubbish dumps in 1961.

largely contemporaneous material from the *Karanis* excavations (in the University of Michigan; still unpublished).[1] The finds from two other important recent excavations may be mentioned in passing, though they are not discussed in the present volume: those from *Sabratha* and *Cosa,* to be published in due course by their respective excavators (Dr K. M. Kenyon and Prof. F. E. Brown). These may be expected to clarify considerably the dating of the earlier North African wares.

Among museum collections of the wares in question, special mention must be made of the rich material in *Tunis* (Bardo) and *Carthage,* and of the large North African collections in *Leiden* and *Copenhagen.* Also significant in this field is the material in *London* (British Museum, London Museum), *Paris* (Louvre) and *Mainz* (RGZM, mostly from Egypt).

It must be stressed at this point that the conclusions presented in this volume are of a provisional nature, and will no doubt require modification as more evidence of a precise nature becomes available. Much of the material cited comes from excavations not conducted according to the strict scientific principles which have for many years past been employed on British and north European sites. Under these circumstances, it is not possible to speak of 'sealed groups', but only of 'probable association of finds'. The forthcoming publications mentioned above, along with those of a number of excavations currently under way, should go far towards solving the many dating-problems which exist at present. One of the chief aims of this book is to provide a typological framework for these future studies.

NOTE: The important new studies by Salomonson (1968) (1969) and Carandini (1969) arrived after the body of the text which follows was completed; some references to them have been included and some modifications made to dates in accordance with their findings.

HISTORY OF THE STUDY OF LATE ROMAN POTTERY

The first mention in print of one of the wares under consideration appears to date from 1833, when Falbe published a jug from Thapsus in North Africa (R.S. Ware, Form 171.46 below).[2] At first, vessels such as this were collected as curiosities. During the nineteenth century a fair number of pieces found their way into various European private collections and museums; a few were published,

[1] The dating here suggested for the fine wares, on the analogy of finds from other sites, is considerably later than that proposed by the excavators. Dr E. Peterson contributes the following remarks:

> 'Pottery, as all other objects, found in the houses and streets at Karanis, have been dated by the papyri, ostraca, and coins, that were found with them in the same rooms, or in other rooms of the same house. . . . Throughout the entire Hill of Karanis there are no evidences in papyri, ostraca, or coins of a sixth-century level of occupation. Judging by all the evidences, dateable papyri, ostraca, and coins, the red ware, plates and bowls, belong to a period no later than the first half of the fourth century A.D.'

Unfortunately virtually no coins were found in immediate association with the vessels listed below (see under African Red Slip Ware and Egyptian Red Slip 'A' and 'B'), though many of the best-preserved of the glass vessels of Harden's late types (see D. B. Harden, *Roman Glass from Karanis,* Ann Arbor, 1936, *passim*) come from the same deposits.

[2] C. T. Falbe, *Recherches sur l'emplacement de Carthage* 128–9, pl. V, 1.

though many still lie unrecorded. The first large collections were gathered together in North Africa by various foreign consuls in the years just after 1820; these have come to form the nucleus of the present-day collections of Late Roman wares in Leiden and Copenhagen. Other major sources were Italy, Sardinia and Egypt, where the trade in antiquities was highly developed. Relatively few examples are recorded from those other regions of intensive tomb-robbing, Cyprus, Syria and South Russia. The great majority of these early finds are African R.S. Ware pieces; thus it is that most of the complete specimens of this ware in existence are now to be found far from their place of origin and devoid of any useful context. Under these circumstances it is hardly surprising that the various Late Roman wares remained unclassified for a century (until 1933).

The later stamped wares early attracted students of Christian art on account of their decoration. A number of examples, mainly from Rome and Carthage,[1] found their way into print. This line of interest culminated in De Waal's article of 1904 (see Bibliography); a survey in Leclercq's *Manuel d'archéologie chrétienne* (1907)[2] includes references to more or less all the examples published up to that date. From these publications we learn something of the Christian motifs present on the later African wares, but little of either their dates or the fabrics involved. One article of this period is, however, of special importance: Gauckler's publication of the Oudna potteries[3] (one of the few excavated production centres of the ware), with its careful drawings of the stamp types found there.

Meanwhile, as a result of other discoveries in North Africa, certain closed vessels with appliqué decoration were commanding the attention of French scholars. We owe to Déchelette the recognition, in these, of a distinctive pottery fabric. In his *Vases céramiques ornés de la Gaule romaine* (1904), while discussing the appliqué-decorated wares of Gaul and the Rhineland, he digresses to mention these vessels, citing a piece from the Rhineland found and published by Jahn in 1863,[4] and six examples from African sites in Tunis.[5] He observes (II 174):

> . . . un groupe de poteries similaires dont la provenance nous est inconnue. Ce groupe n'a pas encore été étudié; . . . rien ne nous autorise à conjecturer que ces poteries appartiennent aux officines de la Gaule. Nous devons toutefois les signaler, parce qu'elles constituent une série parallèle et synchronique aux vases de Lezoux et de la vallée du Rhône.

And later (II 178):

> Dans les nombreuses collections céramiques de la France dont les pièces ont passé sous nos yeux, il ne nous est jamais arrivé de découvrir le moindre fragment de vase appartenant à cette série si caractéristique.

This is the first strictly archaeological appraisal of one of the fabrics here studied. In the years following 1910 many more pieces of this class were found in Tunisia, notably at el-Djem and el-Aouja, attracting the attention of A. Merlin (at that

[1] For the Carthage pieces, see P. Delattre, *Cat. Musée Lavigerie* iii (1899), pl. XI.
[2] II 530–40.
[3] *BAC*, 1897, 454–7, pls. VIII–IX.
[4] *BJ* 33/34 (1863) 229–31, pl. III, 2.
[5] *Cat. Alaoui* (1897) nos. 206–11.

time director of the Antiquities Service in Tunisia), who year by year reported fresh examples in *BAC*,[1] but did not undertake any general study of the ware. After his departure from Tunisia in 1920 interest in the subject seems to have waned; indeed, very few new finds of Late Roman pottery of any description have been recorded from the region until quite recently.

It is to Déchelette, too, that we owe the first close study of the Gaulish *T.S. grise*,[2] which, on account of its distribution pattern and presumed date, he claimed as Visigothic—a term which has remained current until recent years.

At about the same time, finds in Egypt were attracting attention; these were first mentioned by Dragendorff in 1897. Here German scholars played the leading role. The most significant contribution was Pagenstecher's section in the Sieglin Expedition's report (1913). The lavish scale of this publication offered ample space for the introduction of parallel material to supplement the meagre finds from the excavations themselves; these parallels were in the main drawn from Egypt. The two classes principally discussed were the rectangular dishes with relief decoration (African R.S. Ware Form 56) and vessels with stamped palms and geometric motifs (R.S. Ware Style A), which, in view of the lack of published parallels at that time, were naturally assumed to be Egyptian products. No mention was made of the earlier North African finds, since these were not strictly relevant to the pieces in hand. Thus arose the theory of an Egyptian origin for Late Roman stamped wares, one which has been followed by several German and other writers.

The main feature of the story up to this stage is, as may be seen from the preceding remarks, the lack of any real coordination in the approaches of various scholars to the subject. What was sorely lacking at this stage was some generally accepted nomenclature. This may be seen from the following published descriptions (all of which refer to African R.S. Ware): 'frammento di fina argilla detta aretina' (Garrucci, 1880); 'mock-Samian ware' (Bliss and Dickie, 1898); 'plat de terre rouge fine' (Massigli, 1912); 'a piece of a red imitation Samian plate' (Ashby, 1915); 'poterie de fabrication espagnole(?)' (Paris, 1926). Indeed, Technau (in 1929) was prepared to suggest that some pieces of the ware found in Samos might be the famous 'vasa Samia' mentioned by Pliny. Such descriptions have still not entirely disappeared from the scene.

A broader view of the subject may be said to have begun with Kübler's article in 1931 (see Bibliography), in which a study of the late stamped wares of Athens led the author on to consider the wares which had inspired them. Kübler's bibliography covers virtually all the literature on stamped wares which existed at the time. While admitting the presence of many examples in the West, he was still inclined to favour an Egyptian origin for the fine wares.

The major step forward came with Waagé's publication, in 1933, of the Roman pottery from the first season's work in the Athenian Agora. In this the much-needed overall classification of the late red-slip wares appeared. Thanks to the careful treatment of finds which characterized the Agora excavations from their outset, the number of well-dated specimens of Late Roman wares available for

[1] See Appendix 1.

[2] Déchelette (1904) II 327–34, pls. XII–XIII.

study was greater than it had ever been before, enabling Waagé to attempt an overall classification of the material on the basis of fabric. In his own words:

> The numerous fragments of Late Roman pottery from the Athenian Agora made it possible for the present writer to distinguish three characteristic fabrics which were described in *Hesperia* II (1933), pp. 294 ff., and labelled respectively Late Roman A, B and C wares. (*Antioch* iv.i 43.)

The proof of the fundamental soundness of this classification may be seen in the fact that, fifteen years after it had first been proposed, its author could still claim: 'This noncommittal nomenclature seems to have proved adequate up to the present.' (*Antioch, loc. cit.*) Waagé's classification rapidly gained acceptance among excavators in the East Mediterranean. In the West, however, it passed largely unnoticed, owing to the general lack of interest in Roman pottery at the time.

In his 1933 article Waagé, still under the influence of Kübler, suggested an Egyptian origin for all of his three wares (one should note that very few examples of Late Roman 'A' and 'C' had been published at this stage). It was not long, however, before a visit to North Africa caused a change of mind: 'The sight of the wealth and variety of the Late B pottery displayed there forces one to rank the claims of North Africa before those of Egypt.' (*Antioch* iv.i 45.) The pieces from that region published by Holwerda in 1936 (see Bibliography) gave additional evidence to support a North African source for the 'A' and 'B' wares. This fresh evidence was presented by Waagé in *Antioch* iv.i 45–47, which represents the fruits of his studies during the 1930s.[1]

The discussion of the relevant wares in *Antioch* iv.i is unquestionably the most useful and comprehensive study which has appeared on the subject to date. Waagé briefly reviews the work of his predecessors, adding a bibliography (not much larger than that of Kübler). He describes the three main wares in detail, introducing new ones (Late Roman 'D' and a tentative 'E'), and discusses their origins. He notes their distribution, introducing observations made during the course of extensive travels. The Antioch finds are listed according to shape, with ample illustrations, and at the same time an effort is made to construct a complete type-series for each ware by the introduction of examples from elsewhere in those cases where a type was not represented at Antioch. This, which takes the form of a numbered list of forms, is his most useful contribution. The dating of individual shapes is discussed; this has to be based almost exclusively on the evidence (inevitably incomplete) of the Antioch excavations, since previous publications give little assistance, and is perforce rather vague in some cases. However, the basic sequence proposed has been amply confirmed by more recent evidence.

A number of other publications of Late Roman pottery which appeared before 1948 may be noted. In Westholm's *The Temples of Soli* (1936) the author, while aware of Waagé's terminology, preferred to use a different name, 'Monochrome Red Ware', in describing some pieces of African R.S. Ware, but the term was abandoned in his later publication (*SCE* iv.3(1956)). Also in 1936 appeared Holwerda's catalogue of the Roman pottery in Leiden (see Bibliography), which

[1] The publication of this volume was long delayed, as is explained in its foreword.

included a large number of 'North African' pieces from Tunisia. This was the first time that a large collection of the earlier products of the region had been adequately published; it influenced Waagé in his later work. Finally, one may mention Comfort's long article under the title of 'Terra Sigillata' in Pauly-Wissowa, published in 1940. This summarizes the available evidence to date, referring to Waagé's 1933 classification (col. 1305: 'Spätrömisches östliches Geschirr') and to the pieces published by Déchelette and Holwerda (col. 1343, listed separately under 'Afrikanische T.S.'). Like Waagé, he ascribes the later stamped wares to Egypt, though noting the occurrence of pieces as far west as Spain (col. 1340), and pointing out similarities with the stamped wares of southern France (col. 1339).

Two further studies follow Waagé's initial classification. The Dura-Europos report (Cox (1949)) provides further dating-evidence for Late 'A' ware, and includes the first reference to a parallel from north of the Alps in an Eastern excavation report.[1] Wace's study (1948) of the Late 'A' ware rectangular dish series (R.S. Ware Form 56) stresses the influence of silverware, and connections with fourth-century coin-types.

For excavators in the East, Waagé's study of 1948 remains the standard work of reference to date, and has, in general, been followed by more recent writers. The Tarsus report of Jones (1950) added little fresh evidence, but suggested a new generic term for the African wares—'Late Roman Red Ware'—which finds expression in Westholm's 1956 publication and in Robinson's Athenian Agora report (1959). In the latter work[2] reasons are advanced for the abandonment of Waagé's terms, and alternatives are suggested.

Meanwhile, interest in Late Roman pottery *per se* was growing in the western Mediterranean, along with the gradual (and long overdue) introduction of more modern techniques of excavation. Lamboglia's researches at Ventimiglia, begun in 1938, provided the stimulus, and his three major publications (1941, 1950 and 1958/1963) have given rise in recent years to a crop of articles, mainly in French and Spanish periodicals. A feature common to all except the most recent of these is a total disregard of the evidence from the East; the study of the wares in the West has proceeded independently, with its own terminology, drawing only from earlier works such as those of Déchelette and Oswald and Pryce.

In his 1941 article Lamboglia proposed the term 'terra sigillata chiara' to cover the Late Roman red-slip wares (in this case mainly African R.S.), and produced a preliminary type series for the earlier phases. The Albintimilium report of 1950 distinguished four classes (A–D), dating from the end of the first century to the end of the fourth. These are elaborated in two more recent articles, the first (1958) covering the 'A' and 'B' series, the second (1963) dealing with 'C' and 'D'. In these the original type series is much expanded by the inclusion of a large number of specimens from sites in Italy, France and Spain, and much useful dating-evidence is cited, particularly in the case of the earlier forms. Some major weaknesses are, however, evident. The fundamental difference between the African series (t.s. chiara A, C and D) and the purely Gallic series (t.s. chiara B, t.s. lucente, etc.) is not brought out, and confusion is caused by an attempt to equate the vessel forms

[1] To the Virinum finds *(q.v.)* (Cox (1949) 15, n. 84).

[2] Robinson (1959) 60, n. 9.

of both with Dragendorff's forms. In the earlier article the question of provenance of the various wares is left unanswered, and a local origin seems to be assumed; only in Pallarés' supplementary article of 1960 is the existence of similar pieces from Africa recognized, and the possibility of an African source raised. In the 1963 article the existence of the Eastern material is finally noted, and an equation of Waagé's Late Roman A with t.s. chiara C is proposed. The chronology proposed for the later wares, based on the very inadequate evidence from Ventimiglia and similar sites, is far from correct, placing the end of the series about two centuries too early; this appears to be the main reason for Lamboglia's continued exclusion of Waagé's Late B from his t.s. chiara series (see 1963, p. 208).

Following in the path of Lamboglia, a revival of interest in the wares may also be seen in North Africa. Camps (1955) and Allais (1957) include limited type series, illustrated by drawn profiles (both features absent in the older publications). They cite Lamboglia, but not the Eastern material; only more recently has the latter been noted (Allais (1959), Salomonson (1962)).

In the countries north of the Mediterranean region the relative rarity of examples of the wares in question caused them to go more or less unrecognized until fairly recently, despite early finds at Orléans (1846) and Gelsdorf (1863). Thus the publishers of the Carnuntum dish (R.S. Ware, Form 56.14) and the Virinum finds (1948; see Appendix 1) were unaware of the existence of parallels, though in the former case Zingerle, perplexed by an apparently unique vessel, went so far as to suggest that it might be an import from the Greek East. The discovery of the true origin of these wares led to Fremersdorf's excellent article 'Nordafrikanische Terra Sigillata aus Köln' (1959), in which the author not only published a number of examples from Köln, together with their context-material, but also referred to several hitherto unrecognized finds from the northern provinces of the Empire, thereby making a significant contribution to our knowledge of the distribution of these fabrics.

In Britain the first well-documented find of Mediterranean red-slip wares on Celtic sites was at Tintagel, in 1936, and the first piece to be published was the Garranes fragment (1942; see Appendix 1). These pieces were at once recognized as imports, but their Mediterranean connections were not realized until more recently. Radford, in his article on the Tintagel finds (1956), published an overall classification of imported wares from post-Roman British sites which is independent of the terms used in the Mediterranean region; this has been generally adopted by Celtic scholars and is proving fairly adequate for British needs. Waagé's *Late Roman B* and *C* comprise class A ii, the class A i representing a derivative ware which has not yet been identified elsewhere. Over the last few years a good deal of attention has been directed towards these imported wares, and examples have been found on a number of other sites. Thomas's article (1959) summarizes all the finds up to 1959, and stresses the Mediterranean origins of the red wares of class A. A new study which will include the more recent finds is in preparation.[1]

A number of further important studies of Mediterranean and North African wares have appeared in recent years. One is Salomonson's article (1962) on the relief-decorated North African dishes of Form 56, which covers the field thoroughly

[1] By A. C. Thomas and myself.

and stresses the stylistic connections with silverware and ivories.[1] A second study by Salomonson (1968) gives a detailed account of the finds from a central Tunisian site, where several varieties of R.S. Ware are present. This article and Carandini's new study of finds from Ostia (1969) introduce new refinements into Lamboglia's classification of fabrics, together with a number of new vessel types.[2] Finally, one may note Rigoir's two studies (1960, 1968) on the Gaulish *T.S. grise*, which include a type series, a list of stamp types, and distribution lists, together with a survey of previous literature on the subject.

THE BACKGROUND: EARLY ROMAN WARES

The standard fine tablewares used throughout the Roman world in early Imperial times are monochrome red-gloss wares, of which the finest is the so-called *terra sigillata* or 'samian ware' produced in Italy and Gaul. A brief but useful description of these wares is given by Charleston (1955, pp. 5–21); a more detailed study is attempted by Comfort in his 1940 article.[3] For the Gaulish wares Oswald and Pryce (1920) remains the standard textbook.

The beginnings of the red-gloss tradition may be traced in the East. One of the first places where red-gloss vessels became popular at the expense of the standard Hellenistic black-glazed wares was Pergamon, where examples have recently been found in some quantity in stratified groups of the mid second century B.C.[4] The early red-gloss products of the Pergamon factories are studied in detail by Schäfer;[5] they include the series of appliqué-decorated vessels ('Pergamene relief ware') previously studied by Courby.[6] These wares are the direct ancestors of the Çandarli wares of Imperial times (see Ch. V). A second red-gloss ware common in the East in later Hellenistic times is the light-bodied *Eastern Sigillata A* ware[7] (also known as 'Pergamene ware', though the name is erroneous[8]), which appears to be of Syrian manufacture. This ware, which is the standard fine ware at such places as Antioch[9] and Samaria[10] in late Hellenistic and early Roman times, appears to have evolved from a local red-slipped ware tradition at some time in the latter part of the second century B.C.;[11] the earliest well-attested examples remain those from Thompson's Group E in the Athenian Agora,[12] which may date from slightly before or

[1] This is now supplemented by a second article (Salomonson (1969)), covering the rest of the late appliqué-decorated series.

[2] The two works include much-expanded bibliographies, especially for the earlier African RS Ware.

[3] This covers all the fabrics known at the time, together with an exhaustive bibliography to 1938.

[4] Information from J. Schäfer. Cf. Schäfer, *AAnz*, 1962, 781–2.

[5] J. Schäfer, *Hellenistische Keramik aus Pergamon* (1968) 20, 64–100, pls. 22–40.

[6] F. Courby, *Les vases grecs à reliefs* 451–85, pl. XVI.

[7] Termed thus by Kenyon, *Samaria-Sebaste* iii 282.

[8] E.g. by Waagé (1933), Comfort (1940) and Robinson (1959), following Zahn, in *Priene* (1904) 448. The name is discussed at length by Waagé (1948) 20–22, who suggests the tentative name 'Late Hellenistic Red Ware' for its earlier phases.

[9] Waagé (1948) 18–28, 32–38.

[10] *Samaria-Sebaste* iii 306 ff.; also Reisner, Fisher and Lyon, *Harvard Excavations at Samaria, 1908–1910* (Cambridge, Mass., 1924) 304–6, fig. 185.

[11] Some fish-plates show an early stage of its development, in which the gloss is in some cases part-black: *Antioch* iv.i 11, shape 10k, pl. I; also Toronto 910x201.2–3. Cf. also *Antioch* iv.i 12, shape 27a,k, pl. II. Waagé (*op. cit.* 25) suggests a mid second-century date for its introduction at Antioch.

[12] H. A. Thompson, *Hesperia* iii (1934) 422, E 151–2.

slightly after 100 B.C.[1] The ware is common throughout the eastern Mediterranean in the pre-Augustan period.

The red-gloss wares reach their peak in Arretine ware, the *terra sigillata par excellence.* Red-gloss wares came late to Italy, where the locally produced black-glazed wares remained in fashion until near the end of the first century B.C.; the development of a large-scale industry at Arretium (Arezzo) is to be dated in the early years of the reign of Augustus. The Arretine products comprise both relief-decorated and plain wares,[2] the former made in moulds. They bear a highly distinctive brilliant red-brown gloss. The decorated vessels were, in the early stages at least, designed by master artists, and are among the finest representatives of Augustan art, with its Neo-Attic classicizing tendencies. The plain vessels, more numerous, relied for their effect on their glossy surface; these exhibit a whole new range of vessel forms, no doubt evolved at Arezzo in the same creative *milieu.* The Arretine potters regularly stamped their names on their products in self-advertisement—a practice previously only sporadically employed.[3] These new features rapidly secured for Arretine ware the first place on the Mediterranean market, and it became the model for fine pottery everywhere, profoundly influencing even the old-established centres in such matters as vessel forms.

A much-quoted passage in Pliny the Elder's *Historia Naturalis* (XXXV 12 (46), 160) provides us with evidence of the wares which were considered fashionable around the middle of the first century A.D. They are referred to generically as 'Samian' ware, a term for fine pottery which appears in literature as early as Plautus.[4] This term has in the past more than once been interpreted as evidence of the continued production of fine wares in Samos itself, for which there is no archaeological evidence, either in Roman or in Hellenistic times. The passage deserves quoting:

> maior pars hominum terrenis utitur vasis. Samia etiamnunc in esculentis laudantur. retinent hanc nobilitatem et Arretium in Italia, et calicum tantum Surrentum, Hasta, Pollentia, in Hispania Saguntum, in Asia Pergamum. habent et Trallis ibi opera sua et in Italia Mutina . . .

Of the places here mentioned, the various Italian centres and Saguntum in Spain do not appear to be associated with any known red-gloss ware; the 'calices' referred to are in all probability the thin-walled beakers and the like common on Roman sites of the first century B.C. and the first century A.D. Arretine ware and the Pergamon products (i.e. Çandarli ware) are well known. The Tralles products may be tentatively equated with *Eastern Sigillata B* (or Eastern 'Samian') ware,[5] on the

[1] G. R. Edwards now proposes a date for the group of *c.* 110–100 B.C. It is in any case not later than 86 B.C.

[2] For a detailed study of the relief wares, see H. Dragendorff and C. Watzinger, *Arretinische Reliefkeramik* (1949). The plain wares have never been fully studied; for partial classifications see S. Loeschcke, 'Keramische Funde in Haltern', *Mitt. der Altertums-Kommission für Westfalen* v (1909) 101 ff.; A. Oxé, in Albrecht, *Das Römerlager in Oberaden* i (1938); C. F. C. Hawkes and M. R. Hull, *Camulodunum* (1947) 180 ff., pls. XXXIX–XLI; C. Goudineau, *Bolsena* iv, *La céramique arétiue lisse* (*MEFR* suppl. 6, Paris 1968).

[3] For a corpus of Arretine stamps, see A. Oxé and H. Comfort, *Corpus Vasorum Arretinorum* (Bonn, 1968).

[4] *Bacchides* 202.

[5] For this ware, see Kenyon, *Samaria-Sebaste* iii, 282. 'Samian': Waagé (1933), Waagé (1948) 38, Comfort (1940), and Robinson (1959), following R. Zahn, in *Priene* (1904) 447.

basis of some fragments of that ware from Notion near Ephesos bearing the stamp ЄΚΚΑΙ/CAPHΣ.[1]

The closest imitators of Arretine in the East were the factories in Asia Minor. Neither of these seriously imitated the relief wares, but both adopted the vessel forms of plain Arretine and such alien features as the potters' stamps. *Eastern Sigillata B* ware comes closest to Arretine, with its elaborate and minute mouldings, and rouletted decoration. It and the Pergamon products are the only Eastern wares on which name-stamps[2] occur regularly; a one- or two-line rectangular stamp, similar to those found on Augustan Arretine, is normal. Quite likely *Eastern Sigillata B* represents an offshoot of the Arezzo factories, for among its earliest potters' stamps, most of which are in Greek, are several examples of the Latin stamp C. SENT, the mark of a potter active at Arezzo *c.* 20–1 B.C.[3] The early vessel and stamp forms point to a similar date for the beginning of the industry; the earliest dated example of the ware is probably late Augustan.[4] Two phases can be distinguished in the history of the ware:[5] the earlier (Robinson's 'Samian B') covers the period *c.* 10 B.C. to A.D. 75, and comprises the fine vessels with potters' stamps just mentioned; the later, which I place *c.* A.D. 75–150, comprises vessels in a poorer fabric (Robinson's 'Samian A'), in which the vessel forms no longer imitate Arretine types and the name-stamps are replaced by stamped motifs such as palmettes and rosettes.

The Pergamon products of the first century A.D. show similar influence from Arretine ware, as may be seen from Loeschcke's 'earlier group' at Çandarli,[6] and the material from Pergamon published by Schäfer.[7] Direct influence from Italian wares seems to have persisted here rather later than at Tralles: the form of stamp *in planta pedis,* typical of late Arretine, is quite common, and the relatively late forms Dragendorff 18 and 24/25 (flanged bowls) are imitated, to become the standard vessel forms of the late first century and onwards, as in Italian T.S. The later development of Çandarli ware, in the second century and beyond, is discussed in detail on pp. 316–18.

Eastern Sigillata A ware (see above) was subject to the same influences. During the first half of the first century A.D. a new range of vessel forms, derived either directly or indirectly from Arretine ware, gradually ousted the standard late Hellenistic repertoire.[8] Higher feet, new schemes of decoration and occasional potters' stamps[9] attest the influence of *terra sigillata.* These changes enabled the ware to remain competitive throughout the first century (a fair number of examples have been found as far west as Pompeii), though after about A.D. 100 its export trade declined sharply. A closely related ware made in Cyprus had a fairly wide circulation during the first century A.D.; this I have discussed in a recent article.[10]

[1] *BCH* xlvii (1923) 385, fig. 23, top l. The rouletted decoration and stamp types of these pieces are characteristic of the ware. Caesarea was the official name of Tralles in early Imperial times: see Pauly–Wissowa, *Realencyclopädie,* under 'Tralleis', col. 2105 ff.

[2] Frequently mottoes rather than actual names.

[3] First noted by Zahn, *Priene* (1904) 445. For Arretine pieces, see Oxé and Comfort, *Corpus Vasorum Arretinorum* no. 1732. The *Eastern Sigillata B* stamps are of the characteristic ligatured form.

[4] Robinson (1959) 12, F 15.

[5] *Ibid.* 12, n. 9.

[6] Loeschcke (1912) 350–1 and *passim.*

[7] J. Schäfer, 'Terra Sigillata aus Pergamon', *AAnz,* 1962, 777–802 *passim.*

[8] Waagé's 'Roman Pergamene': *Antioch* iv.i 32–38.

[9] These are mostly late and of the 'motto' type, suggesting Tralles as the immediate source.

[10] J. W. Hayes, 'Cypriot Sigillata', *RDAC,* 1967, 65–77, pl. XVI.

In the West, Arezzo retained its prestige until around A.D. 60, and until that time largely dictated fashions elsewhere. The production of relief ware virtually ceased with the end of the reign of Tiberius, but new varieties of the plain ware continued to appear, and the quality of the ware remained consistently high. Vessel forms tended to become rather more simple, and appliqué decoration, used sparingly in late Augustan and Tiberian times, became the standard kind of decoration in Claudian and Neronian times. Some later products (Neronian-Flavian) have barbotine decoration. By the middle of the century local Italian T.S. workshops were challenging the Arezzo factories, and before long they had captured most of its markets. The history of these Late Italian wares is one of dreary repetition of late Arretine shapes (especially dishes of Dragendorff form 18 and flanged bowls). They finally disappeared about the time of Hadrian.

Meanwhile, the Gaulish factories were coming to the fore as producers of *terra sigillata* in the West. The first of these were established *c.* A.D. 10–15 as offshoots of the Arezzo industry, whose traditions they inherited. The Gaulish wares, which span several centuries, are generally divided into three major groups: *South Gaulish,* the earliest, which predominated during the first century A.D., and *Central* and *East Gaulish,* which flourished in the second and third centuries. Of these, only the first need concern us here, for the products of the Central and East Gaulish factories rarely appear in the Mediterranean provinces, having their main markets further north. The typical South Gaulish products display a fabric the equal of that of Arretine ware (and better than that of the later Italian T.S.), with in most cases a brilliant red gloss. The ware is generally thicker than Arretine, and the vessel forms are less elaborate, except in the initial period when the influence of Arezzo was still strong. Most of the later features of Arretine, such as appliqué decoration and stamps *in planta pedis,* were not imitated, since South Gaulish ware rapidly developed a style of its own. New varieties of relief ware were developed and rapidly took over the market from their Arretine counterparts. By about A.D. 50 South Gaulish ware had become the principal decorated ware on the Mediterranean market,[1] and was beginning to be copied in Italy itself, in the so-called 'Late Italian' relief ware.[2] It continued to be exported all round the Mediterranean until the early years of the second century.[3] In contrast, the plain wares had a much more limited Mediterranean market, confined mainly to the West; in Italy and further east they were virtually shut out by the rival Italian products. The main markets for the ware, even in the first century, were in the northern provinces.

Terra sigillata began to be made in Spain during the first century, under the influence of the South Gaulish wares. These Spanish wares, now studied in detail by Mezquiriz de Catalán,[4] were produced mainly for the home market, though they are also found in some quantity on sites in Morocco. Both plain and decorated types were produced; the repertoire consists mostly of debased versions of Gaulish

[1] The earliest pieces from Corinth seem to be of Claudian date. Similar material is reported from the Cosa excavations.

[2] For a study of this, see H. Comfort, *AJA* xl (1936) 437–51.

[3] See for instance the Antioch pieces (Comfort, *Antioch* iv.i 71–74), which are mostly Banassac products of Domitianic and Trajanic date.

[4] M. A. Mezquiriz de Catalán, *Terra Sigillata Hispanica* (Valencia 1961; 2 vols.).

shapes. The Spanish wares continued to be made until the fourth century, as is shown, for instance, by the finds from Lancia.[1] The main significance of this late survival lies in the fact that it effectively prevented the entry of Mediterranean wares in most areas of Spain until after A.D. 350.

In the first century A.D. the influence exerted by Arretine and the various Italian wares had imposed a certain uniformity in pottery styles all over the Roman Empire. From the end of the first century onwards, however, the pottery styles of the Mediterranean provinces and those of the North part company and develop along different lines. Hereafter, Gaulish wares set the pattern for fine wares in the North (Gaul, the Rhineland, Britain, Spain and the Danube frontier); the plainer wares of these regions also show some uniformity. Meanwhile, in the Mediterranean provinces, a different development occurred, based largely on North African wares; it is this Mediterranean tradition which forms the subject of the present volume.

[1] F. Jordá Cerdá, *Excavaciones arqueológicas en España* i, *Lancia* (1962) 24–25 (a dated deposit of *c.* 340–360).

II

AFRICAN RED SLIP WARE

THE most important class of Late Roman pottery current in the Mediterranean world is the series of red-slipped wares variously called *Late Roman A* and *B*, *Late Roman Red Ware*, and *terra sigillata chiara A*, *C* and *D*, produced by various North African workshops over a period of some six centuries from the end of the first century until well into the seventh century A.D. These wares, like the various Gaulish wares, all belong to a single unbroken tradition, whose origins may be traced back to Hellenistic times. I propose the name *African Red Slip Ware*[1] to cover the whole series; this serves to distinguish them from the contemporary products of other regions, such as the *terra sigillata chiara B* and *Late Roman C* of previous classifications (which will be discussed later). The series is marked off from the Italian and Gaulish *terra sigillata* wares which precede it by differences in fabric: the clay is generally coarser and lighter in colour, and does not, except in rare cases, have the high gloss surface of the earlier wares. *African Red Slip Ware* is the leading fine ware in most parts of the Mediterranean world (including Rome itself) over a period of several centuries, the counterpart of the Gaulish wares in the northern Roman provinces, and seems to have dictated pottery fashions throughout the area for much of this time.[2]

DEFINITION OF THE WARE

As in the case of the Gaulish products, it is not easy to decide what should be included within the limits of the ware, and what should be classed as an imitation or local variant. Several varieties of red-slipped ware, all more or less related to Waagé's and Lamboglia's categories, appear in various regions of North Africa; strictly speaking, these ought to be classed under the general heading. However, most of these are of local importance only, being rarely exported to any distance. It would seem best to disregard them, and to reserve the name *African Red Slip Ware* for those fabrics which had a regular overseas market. This—the appearance or non-appearance of a ware on non-African sites—is the criterion which will be applied in the discussion which follows. The other African wares are noted on pp. 300–9 below.

GENERAL CHARACTERISTICS

The standard body-clay of the series is fairly coarse, with a rather granular appearance. The normal colour-range is orange-red to brick-red; many of the finer

[1] Abbreviated to '(African) R.S. Ware' in the text which follows. I owe this name to Dr K. M. Kenyon, who has adopted it for the pieces from her excavations at Sabratha (publication forthcoming).

[2] See discussion of other wares below.

pieces have a pronounced pinkish tinge. The commonest impurity is lime, frequently present in small particles, with occasional larger lumps where these have not been eliminated by the initial washing of the clay; these sometimes erupt as a result of firing, to leave small pock-marks on the surface. In addition, fine quartz particles, white or brownish, are frequently visible, together with occasional black particles; these appear to account for much of the granular texture of the ware. Specks of silvery mica can be observed on most vessels, though these are never present in any great quantity.

The slip used, which is merely a refined version of the body-clay, is of good quality but lacks the reflective powers and glossiness of that on *terra sigillata*, except in rare instances. It is generally a shade or two deeper in tone than the body-clay. When thickly applied it has a smooth, faintly lustrous appearance; thinner coatings tend to be matt and to merge with the body-clay. In the latter case, it is not always possible to distinguish a thin coat of slip from mere wet-smoothing of the surface. Being of the same basic consistency as the body, it normally fuses well and is not prone to flaking; the eruption of lime particles below the surface is the most frequent cause of damage. Light polishing seems to be responsible for its generally smooth appearance.

The great majority of vessels, as in the case of *terra sigillata*, belong to a comparatively small number of highly standardized types. Individual vessel-forms show relatively little development, being in most cases superseded by completely new shapes. The various factories making the ware seem to have specialized in three or four 'lines' only at any given time, which they and they alone produced. The vessel-forms change fairly frequently; few survive more than a century without drastic modification—a factor which greatly assists the task of classification.

Decoration is in most cases restrained; it is either stamped, incised or modelled in relief (as on *terra sigillata*), never painted. Many of the later examples of the ware bear stamped decoration on the floor within a surround of grooves, in the manner of a large medallion; as in the case of the stamped decoration on Classical and Hellenistic black-glaze wares, one may here point to the influence of contemporary metalware. The same is true of the rare examples with moulded relief decoration (see especially Form 56 below), a technique less common here than on the *terra sigillata* wares. Appliqué decoration, common on Arretine and the later Italian wares, is fairly widely employed, though in a rather different manner. This technique is occasionally used for large figured compositions; here one may possibly detect the influence of Gaulish wares. Most of the African products, however, are undecorated, like their counterparts in *terra sigillata*, with grooves and rouletting constituting the only form of ornamentation. A development of the latter technique characteristic of the African wares is the covering of broad surfaces with row upon row of overlapping rouletting, in such a manner that the individual strokes appear to the eye to be arranged in vertical or radiating chains, an effect aptly described by various writers as 'feather-rouletting'. This effect seems to have been deliberately exploited. Such developments aside, there remain many vessels—notably the popular Form 50—which are entirely undecorated, and rely on the thinness or high quality of the fabric for their appeal.

DEVELOPMENT OF VESSEL FORMS

Vessel forms provide a firmer guide to the overall development of the ware than the changes in fabric (which are naturally largely due to local factors). For this reason they should be considered first.

The typical forms in the earliest phase of the ware (late first–early second century) are dishes of fairly small size (Forms 3–6 in type series below), mostly *c.* 14–20 cm. in diameter. Most of these imitate *terra sigillata* shapes: Form 4 is modelled on Dragendorff form 15/17, Form 5 on Dragendorff 18. In the former case the shape resembles that of the Gaulish version, in the latter it approximates more closely to Italian products. The original *terra sigillata* shapes are, however, considerably modified with a view to easier manufacture: the foot is made much lower, and the floor curves upwards towards the edge; decoration is simplified. These pieces tend to retain a small offset where the wall meets the floor; the normal decoration consists of a single groove or line of rouletting positioned more or less directly over the foot. A few early pieces have imitation potters' stamps, but these soon disappear. The related Form 3, a fairly faithful copy of the Gaulish Dragendorff form 36, has similar features, but varies much more in size; it has also a smaller deeper counterpart, Form 2, modelled on the Gaulish form Drag. 35. Both of these bear barbotine ivy-leaves on the rim, rendered in the Gaulish manner.[1] In brief, the earliest African Red Slip Ware products are basically imitations of the latest Gaulish and Italian products found on North African sites,[2] which they supersede.

With the second century the influence of *terra sigillata* comes to an end. A series of bowls, with the same type of low foot and curving floor as on the early dishes, become popular (Forms 7–9). These are mostly of about the same size as the dish series, and bear rouletted decoration on the outside instead of the floor; a rare larger version with similar decoration is represented by Form 10. Form 8 may be related to the earlier Dragendorff form 29 in *terra sigillata*, but if so is a rather free copy, lacking the relief decoration of the latter. In later versions of these forms and in the parallel Form 14 the rouletted decoration disappears. The early dish series develops along similar lines, adding a new variety, Form 16.

By the end of the second century a new basic dish-type has come into existence. It is larger, around 20 to 30 cm. in diameter, with a broad flat floor carried on a low ledge-like foot situated under its outer edge (Form 27). This becomes the standard dish-type in the early third century (Forms 29–33), being adopted for the finer varieties which become popular then. Along with these a class of small deep bowls emerges, characterized by a hemispherical or slightly carinated body, a broad flat rim and a low foot (Forms 43–44). These are smaller than the bowls of the second century, and, like the dishes, are undecorated.

The standard vessel-forms of the new, finer varieties of the ware introduced in the third century are mostly modified versions of the same shapes. Commonest are dishes and plates with broad flat floors with the vestiges of a foot near the outer edge (Forms 48–50), mostly between 25 and 35 cm. in diameter. From these

[1] The more elaborate schemes with groups of dots among the leaves, etc., present on the late Arretine versions of the type, are not found.

[2] For these, cf. Baradez, *Libyca* v (1957) 221 ff. (a Neronian grave-group from Tipasa with examples of most of the types mentioned above). The same vessel types are present in considerable quantities throughout North Africa.

develop the dishes of the fourth and fifth centuries, on which the foot disappears completely, to be replaced by a low base-moulding (Forms 50B, 57, 62) or, more commonly, a slight hollowing of the underside (Forms 58–61). These dishes retain the broad flat floors of their predecessors, which now receive stamped decoration. Their average size increases slightly (D. *c.* 25–40 cm.), and occasional examples are very large indeed (up to 55 cm. in diameter). Alongside these one finds small bowls with wide rims (Forms 52, 70–74), successors of the forms noted above. These are common during the fourth and fifth centuries, when various kinds of decoration (applied, notched, punched, etc.) are employed on the rim. Most are about 11–20 cm. in diameter. On the fifth-century examples the foot tends to increase in height.

From early in the third century onwards, large shallow bowls with flaring rims and almost flat bases are also popular (Forms 45, 67, 68). These range from about 20 to 50 cm. in diameter, Form 68 supplying the largest examples. Most bear some form of stamped or rouletted decoration. On these, the form of the foot develops from a low triangular type to a low base-moulding combined with a groove. The distinctive rim-mouldings of Forms 67–68, which parallel developments on the small bowl series, are to be noted.

In the course of the fifth century the footed dish comes back into favour, gradually ousting the flat-based varieties to become the standard type in the sixth century and later (see Forms 82–84, 87–88, 103–4). These, and the high-footed plates which accompany them (esp. Form 89), are presumably modelled on metalware prototypes.[1] There are two basic varieties: one (Forms 83–84, 103) has a low steep wall, sometimes decorated on the outside; the other has a sloping floor terminating in a more or less knobbed rim, the foot being set well back under the vessel. Almost all of these bear stamped decoration, sometimes supplemented by rouletting.

The late fifth century also sees the emergence of a class of small bowls (D. *c.* 17–22 cm.) characterized by a high flaring foot and sagging floor, marked off from the wall by a small offset over the foot (Forms 95–99). These regularly bear a single stamped motif at the centre, rather in the manner of a potter's stamp. They remain popular throughout the sixth century, the flaring rims of the earlier types being superseded by the simple rolled rim of Form 99. The latest pieces (Form 99C) are undecorated, and carry the series into the early seventh century.

Alongside these, but less common, are a series of larger bowls with flat rims and mostly rather high feet (Forms 93–94, 107); whether these form one continuous series is at present not very clear. They have an average diameter of 25–30 cm.; the earlier ones bear single stamped motifs.

Also common during this period are the flanged bowls of Form 91, with feather-rouletting on the interior. These first appear around the middle of the fifth century and last, with various modifications, until the early part of the seventh. They may be derivatives of the earlier rouletted bowls of Form 53; whether they are in any way related to the series of flanged bowls current in the northern provinces in late Imperial times is by no means clear.

[1] Cf. Emery and Kirwan (1938) pl. 65 A, C, from Ballana (with a similar grooved rim), found in the same tomb as Form 82.3 below. For a silverware parallel to Form 89, see the Sutton Hoo platter (Dodd (1961) no. 4, with bibl. cited).

In the final phase of the ware, corresponding roughly to the early and mid seventh century, the dish and plate series merge to produce one series of large rather high-footed vessels, without decoration (Forms 105–106). Another development leads to a shallow dish or bowl with rudimentary rim and foot, decorated with a series of burnished lines (Form 109). No further development can be traced.

CLOSED FORMS AND MISCELLANEOUS

In the earlier stages of the ware these seem to be rather varied; in addition to the normal mugs, jugs and flagons one finds a series of feeder-vases with strainers (Forms 121–123, 125), 'pilgrim-flasks' (Form 147), inkwells (Form 124), a cruet (?) (Form 126), and some miniatures (Forms 132–133). Related semi-closed types include a number of beakers and bowls with slip on the outside only (Forms 142–144); a *patera* or 'saucepan' of the kind familiar in bronze in the second century also appears to be present (Form 146). Relatively few examples of any one type are preserved. The earliest examples would appear to be mugs of typical first-century shapes (e.g. Form 131) and jugs and two-handled flagons with metal prototypes (Forms 151, 161). Also early are the strainer-vases of Form 121 and some inkwells with Gaulish prototypes (Form 124). The pilgrim-flasks of Form 147 may also be derivatives of a first-century Gaulish shape. Rouletted decoration similar to that on the early dish and bowl series appears at an early stage, though possibly not at the very beginning of the series; it is present on a wide range of shapes. Rather apart from these stand two fairly common forms without any decoration (the askos Form 123 and the jug Form 160); these, together with some mugs of Form 140, seem to form a later group.

This early series is succeeded in the third century by the appliqué-decorated jugs and flagons listed below under Forms 171–179. The transition may be observed in Form 171, no. 49, which retains the handle-type and base-form of the earlier series. Features of the group are a very thin fabric, a distinct foot and relief-decorated handles with foot-shaped terminals, probably borrowed from metalware.[1] Related in ware and decoration are the wine-dipper (?) Form 127, the crater-like vessel Form 145 and the flagon Form 165. This series comes to an end before the close of the third century, and appears to be without successors. The only closed vessel of later date which may be assigned to the main African Red Slip Ware series is the solitary example of Form 180. One can only suppose that the market for such products was ruined by increasing competition from cheap glassware; it had, in any case, never been very large. Another factor may have been changes in manufacturing techniques (see below).

One oddity, probably of late date, is the stemmed goblet Form 170 (Plate XX), probably a copy of late goblets in silver.

COOKING WARES

Coarser versions of the ware, mostly lacking the surface slip, are common in the earlier stages; some go back into Hellenistic times. These wares, fairly widely exported as early as the first century B.C., form the original base from which the

[1] For similar handles on bronze jugs, see for instance A. Radnóti, *Die römischen Bronzegefässe von Pannonien* (Budapest, 1938) 167, pl. XLIV 1,2,5–7 (dated second–third century).

red-slipped series developed. The earliest vessel-forms seem to be a flat-rimmed casserole with lid (Forms 191–192), a variant of the standard Hellenistic casserole-type, and a deeper casserole with convex sides (Form 193). These are followed by a new type with a vertical ledged rim, which appears first in an unslipped version, then (after the introduction of the slipped wares) with a slip-coating on the outside (Forms 194, 19). A shallow rounded bottom is a standard feature; along with the introduction of a surface slip this begins to be covered with a series of fine grooves, or is given a low foot. The earlier examples are mostly of medium size or smaller (D. around 12–20 cm.), but during the second century a general increase in size is evident, leading by Severan times to vessels with a diameter of 30 cm. or more. The commonest shape at this stage is the casserole Form 23, with a grooved convex bottom, a thin slip and a slight flange at the base of the wall; its lid may be represented by the unslipped Form 196, also common.

Alongside these, and common in the late second to early third centuries, are a series of flat cooking-dishes and lids with a burnished slip surface (Forms 181–182), which appear to be African derivatives of the 'Pompeian Red Ware' of earlier Roman times.[1] An earlier version of the dish-form, of smaller size, appears in some regions already in the first century (see Form 181, no. 1, below). The fabric differs somewhat from that of the casserole series.

The latest pieces in the cooking ware series, found in both of the fabrics mentioned above, are vertical-sided casseroles with heavy rims, often with grooved bases (as above) and ridged walls (Forms 183–4, 197); some large open jars (Form 199) are related to them. These seem to date mostly from the third century. There are no cooking wares corresponding to the later red-slipped series.

CATALOGUE OF VESSEL TYPES

An asterisk indicates that the profile is drawn in a Figure

FORM 1

Dish, closely imitating Dragendorff form 18 in Italian T.S.: flat floor, straight steep wall with slight rim-roll, square-cut foot. The decoration follows that of the T.S. type: grooves on the floor, a slight offset at junction with wall, a further groove inside rim. Very rare; only one relatively complete example can be cited:

*1 Rabat Roman Villa Museum (Malta), uncatalogued; Zammit, *Ant. J.* iii (1923) 223–5, fig. 5. Fragmentary; est. D. *c.* 14·2, D. of base 5·0, H. 3·9.[2]

There is no good context-evidence for the date of this form. The steep-walled shape corresponds to the earlier version of the Italian T.S. form, of Claudian–Vespasianic date (cf. FIG. 1 *a*), rather than to the more flaring version of Flavian–Hadrianic date (FIG. 1 *b*). It bridges the gap between the T.S. shape and the dishes of Form 5 (*q.v.*). Its rarity indicates that it was not produced for long.

[1] For this fabric, which is found throughout the Roman world, see especially K. M. Kenyon in *Samaria-Sebaste* iii 298 with refs. cited.

[2] The dimensions given by Zammit are incorrect; see FIG. 2.

Probable date: c. A.D. 60–80.

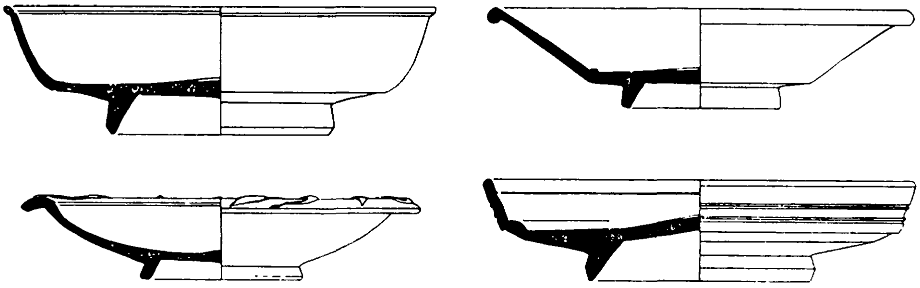


FIG. 1 Italian and Gaulish protypes of African R.S. Ware Forms 1–5 Scale 2 : 5

a Corinth, C–36–278. Arretine, stamped ZOILI, *c.* A.D. 40–60.

b Vatican, Museo Sacro. Italian T.S., stamped PAVPO, early second century (?).

c Toronto 910x156.3. South Gaulish, Neronian–Flavian.

d Yale 1913.532. South Gaulish, stamped PONTIMA, Flavian.

FORM 2

Lamboglia 4/35.

Small bowl, corresponding to Dragendorff form 35 in Gaulish T.S. Curved bowl with small low foot; broad convex rim bearing a groove along the inner edge, and decorated with a string of barbotine leaves, as on its Gaulish counterpart. A few examples have a more or less hemispherical body-form (see nos. **1–2**), but most tend to a more conical shape with a flatter curve (cf. Form 3 ff.). This may have some chronological significance. For a variant, close to Form 3B, see Form 3 no. 87 below. Rather uncommon.

Examples:

*1 Sebha (Libya, Fezzan) H 66, from Germa. D. 16·6. Deep rounded bowl. Five barbotine leaves.

2 Boston 88.586, bought in Rome; E. Robinson, *Cat. of Greek Etruscan and Roman Vases* (Boston Museum of Fine Arts, 1893), no. 586. D. 15·3. Form as **1**. Five leaves.

3 Ostia 16051. Fragmentary; est. D. 14·5. Form similar to **4**.

*4 Copenhagen ABc 734, from Sidi Daoud(?), Tunisia; *CVA Copenhague* 7, pl. 304.5. D. 10·4. Less rounded form. Six leaves.

5–11 Leiden; Holwerda nos. 583–589, from el-Djem region and other parts of Tunisia. D. *c.* 9·5–10·5. Mostly as **4**. Four or five leaves. One example has a grooved foot.[1]

Note: some of the vessels in Holwerda's series nos. 574–582 (see under Form 3A **17–19**) should also probably be classed here.

Variant

12 Leiden HP 64, from el-Djem region; Holwerda no. 590, pl. IV. D. 9·5. Deep, with narrow ungrooved rim. Six leaves.

[1] The piece which appears as '585' on Holwerda fig. 12 is in fact a Gaulish piece of Drag. form 35 (cat. no. HA 17). It does not correspond to the vessel drawn *ibid.* on pl. IV.

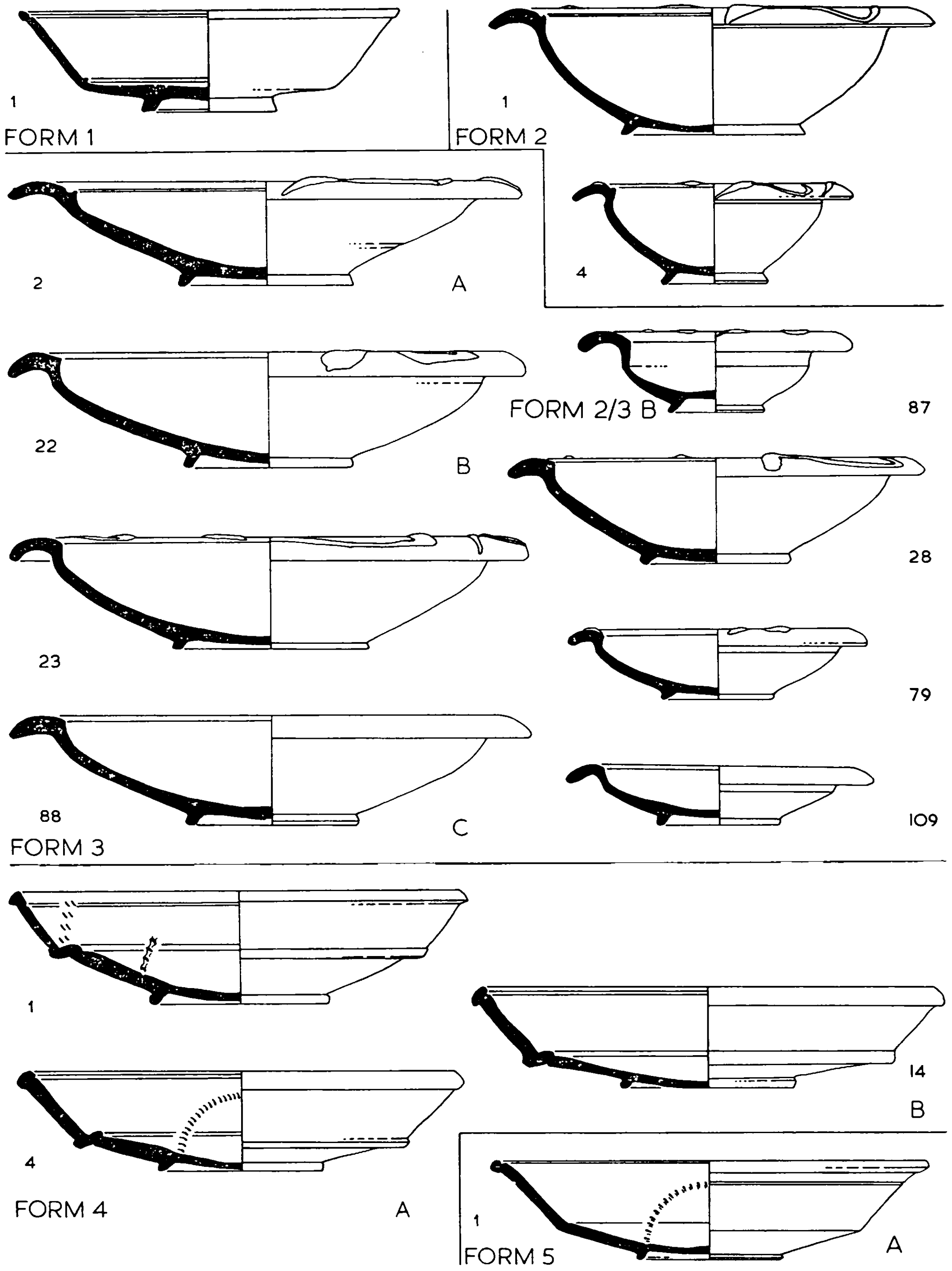


FIG. 2 Scale 2 : 5

This form is rare outside Tunisia, which may indicate that the main period of production preceded the first widespread exportation of the ware (see further discussion under Form 3). Precise dating-evidence is rare; no. **1** was apparently found together with Italian and Gaulish wares and a number of other early R.S. Ware pieces (including Forms 4, 5, 6), which suggests a possible date of *c.* A.D. 70–80, though whether these can be taken as forming a single closed group is open to doubt.[1] It presumably is more or less similar in date to Form 3A. Probable date: Flavian, and possibly earlier.

FORM 3

Lamboglia 4/36, Antioch 847, Salomonson A 1.

Dish, corresponding to Dragendorff form 36 in the Gaulish wares. Shallow curved floor, broad convex rim, small low foot. Often decorated with barbotine leaves on the rim, like Form 2, which is its deeper counterpart. Three principal types may be distinguished:

A with broad rim, bearing a groove along the inner edge, and decorated with barbotine leaves; cf. Form 2.
B with barbotine decoration on the rim but no groove; rim often narrower than in the case of Type A.
C as Type B, but undecorated.

Most examples are medium-sized (D. *c.* 16–21), but small-sized versions of Types B and C are also quite common (D. around 10–11). A few larger pieces (D. 25 or over) occur; for examples see nos. **1**, **20**, **21** below. Common, with the exception of Type A, which has a much more restricted circulation.

Examples:

Type A

1 Leiden HA 19; Holwerda no. 547. D. *c.* 25. Form as **2**. Six leaves.
*2 Cambridge, Fitzwilliam Museum; E. A. Gardner, *Cat. of the Greek Vases in the Fitzwilliam Museum, Cambridge* (1897) 89, no. 269. D. 19·1. Six leaves.
3 Vienna IV 1318. D. 18·6. As **2**. Six leaves. PLATE I*a*.
4 Louvre CA 2827, from Sidi el-Hani (Tunisia). D. 17·3. As **2**. Six leaves.
5 Copenhagen ABc 727, from Sidi Daoud; *CVA Copenhague* 7, pl. 303. 1. D. 18·7. Five leaves.
6–10 Carthage, Musée Lavigerie. Five examples noted (uncat.). D. 18·1–19·6 and similar. One fine piece (fragmentary) with six or more leaves; rest with five leaves (in one case four).
11 Tunis, Bardo, uncatalogued (ex Houdart Coll.). D. 18·3. Five leaves.

[1] I was shown this material in 1963, shortly after its discovery, when it was claimed to be from a single deposit (the excavator believed a pottery shop, though a rich burial seems more likely), with some of the vessels stacked on top of each other. Some of the pieces listed below were catalogued by myself on this assumption. The excavator (M. Ayoub) has subsequently produced a report in which he distributes them among a number of different tomb-groups. Until conclusive evidence is made available, this interpretation (and possibly also the original one) must be treated with suspicion.

12–15 Leiden H 17, HA 27, HAA 27, HP 67 (the last two from the Beja area and el-Djem (?)); Holwerda, in series nos. 548–567. D. in range 18–20. Six leaves (in one case five).

16 Leiden HA 20; Holwerda no. 572. D. *c.* 17·5. Five leaves.

(17–19 Leiden HA 18, HL 4, HP 65; Holwerda, in series no. 574–582. D. around 14–15. Five leaves. These should probably be classed as large examples of Form 2; cf. Form 2 nos. 1–3.)

Type B

20 Sebha (Libya) H 64, from Germa. D. 25·8. Five leaves.

21 Copenhagen ABc 723, from Sidi Daoud. D. 26·2. Six leaves.

*22 British Museum 56.12–23.402, from Tharros. D. 19·2. Four leaves.

*23 Sebha H 67, from Germa. D. 19·4. Four leaves.

24–26 Sebha H 68–70, from Germa. D. 19·3–20·5. Four leaves.

27 Sebha H 27, from Germa. D. 16·8. Four leaves.

*28 Vatican, Museo Sacro 1233. D. 15·5. Four leaves.

29 Carthage, Musée Lavigerie, uncat. D. 20·5. Four leaves.

30 Ventimiglia; Lamboglia (1941) 14; *id.* (1958) 267, form 4/36A, type specimen. D. *c.* 20. Several other examples similar (unpublished to date).

31 Ventimiglia; Barocelli, *Mon. Ant.* xxix (1923) 129–130, fig. 41 d. D. *c.* 17.

32 Torino, Museo di Antichità, from Tharros; *Studi Sardi* xiv–xv (1955–57) 304, pl. I, 19. D. *c.* 16. Four leaves.

33 Cagliari; *NSc* 1949, 258–9, figs. 32, 34 d. D. *c.* 19·6. Four leaves.

34–38 Tipasa, Maison des Fresques cemetery, tombs I, XXII, XXIII (five examples); Baradez (1961) 13, 14, 38, pls. I, VII, IX. D. 18·4–19·6. Five leaves.

39–48 Copenhagen ABc 728, ABc 126–129, 131, 725, ABc 134–135, ABc 137 (from Sidi Daoud and elsewhere in Tunisia); *CVA Copenhague* 7, pls. 302. 5, 303. 2–6, 304. 1–4. D. 18·3–20·5 (**39–45**), 16·0–16·3 (**46–47**), 14·2 (**48**). Four leaves (five on **39**).

49 Tunis, Bardo, from Haidra; *Cat. Alaoui* (1910) 313, no. 693. D. 14·3. Four leaves.

50 Carthage, Musée Lavigerie, uncat. D. 15·6, H. 4·6. Deeper variant form. Four leaves.

51–77 Leiden, from various parts of Tunisia; Holwerda, series nos. 548–582, excluding those pieces listed under Type A above. D. in range 13·5–20 (mostly 18–20). Normally four leaves; among the larger examples some have five, and one six; one of the smaller pieces (D. 15·7) has three only.

78 London, Guildhall Museum 20565; provenance uncertain. D. 20·8. Four poor leaves.

Small version

*79 British Museum 56.12–23.403, from Tharros; Walters (1908) L 50. D. 11·2. Three leaves.

80 Tunis, Bardo (marked 'VIII–16'). D. 10·6. Three leaves.

81 Tipasa, E. cemetery; *Libyca* v (1957) 182, pl. V, tomb B 30 *bis*, b. D. 11·2. Three leaves.

82 Tipasa, Maison des Fresques cemetery, tomb XXXIII; Baradez (1961) 42, pl. X. D. 10·8. Four leaves.

83–85 Copenhagen 8061 (from el-Djem), ABc 138–139; *CVA Copenhague* 7, pl. 304. 10–12. D. 10·2–10·8. Three leaves.

86 Louvre, uncat. (?). D. 10·3. Three leaves.

Variant: Form 2/3B

*87 Copenhagen ABc 735, from Sidi Daoud (?); *CVA Copenhague* 7, pl. 304. 7. D. 10·2. Wide rim (cf. Form 2, but lacking the groove), rather deep body. Four well-formed leaves.

Type C

*88 Sebha H 77, from Germa. D. 19·4.

89 Sebha H 95, from Germa. D. 21·7.

90–93 Rome, Museo Africano 5151, 5154–5156, from Germa region; for one of these see *Mon. Ant.* xli (1951) 341, fig. 129. 2.[1] D. 20 and similar.

94 Corinth, North Cemetery; mentioned and illustrated by Waagé, *Antioch* iv.i 49, fig. 26 bottom (definitive publication forthcoming). D. *c.* 19·4 (?).

95–97 Copenhagen ABc 124, 724, 829 (**96–97** from Sidi Daoud); *CVA Copenhague* 7, pl. 312. 12–14. D. 18·8–23·0.

98 Tipasa, Maison des Fresques cemetery, tomb XII; Baradez (1961) 27, pl. V.[2] D. 20·5.

99 Torino, Museo di Antichità, from Tharros; *Studi Sardi* xiv–xv (1955–57) 304, pl. I, 15. D. 16.

100 Barcelona 7537; Adroer (1963) 120. D. *c.* 16·8.

101 Ventimiglia; Lamboglia (1958) 267, form 4/36B, type specimen. D. *c.* 16·5.

102 Sétif, E. cemetery; Février and Gaspary, *Bull. d'arch. algérienne* ii (1966–67) 30, fig. 22, no. 1. D. 16·6.

103–108 Leiden, from Sbeitla, Beja and Lepcis Magna; Holwerda nos. 591–596. D. in range 16·4 to *c.* 19·5. Holwerda no. 592 flatter than usual, in poor fabric.

Small version

*109 Ostia 16053. D. 11·5.

110 Ostia 16052. D. 11·75.

Variants

111–112 Leiden HNN 151, HMM 52, from Ksour es-Saf (?) and Beja; Holwerda nos. 597–598, fig. 12. D. 10·6, *c.* 10·0. Broad rim with groove along inner edge, as on Type A; no barbotine.

[1] Nos. 5151 and 5154 are labelled as objects 3 and 5 from Tomb 21 in Caputo's 'necropoli meridionale'; the others are also supposed to have come from this tomb. This does not correspond with Caputo's publication, where only one or, at most, two examples of Form 3C are listed from this tomb (no. 2 (illustrated) and, possibly, no. 5).

[2] Claimed to be Arretine ware (burnt).

Variant type

113 Copenhagen ABc 733, from Sidi Daoud; *CVA Copenhague* 7, pl. 308. 2. D. 16·0. As Type B, but with stamped decoration on rim in place of barbotine ornament. Normal fabric.

For further examples (various types) see Salomonson (1968) 98–9.

An early form, closely related to the series of dishes which follow (Forms 4–6); in all the treatment of the foot and floor is similar. These forms, together with the related bowls Forms 7–9, are among the earliest to reach Italian and other W. Mediterranean sites, in the years after A.D. 80. That Form 3 was already being produced in Flavian times is clear from its similarity to the South Gaulish form Drag. 36 (current during the second half of the first century, cf. FIG. 1*c*); the same applies to Form 2, the counterpart of Drag. 35. The exact relationship between the Gaulish and the African forms is by no means clear, though on balance it seems likely that the Gaulish form was first in the field. How long Form 3 survived is also far from clear.

The best external dating-evidence is for Type B, and indicates a late first- to early second-century date. The pieces **34–38** come from a cemetery of approximately Vespasianic to Trajanic date; three of them were found in association with a coin of A.D. 71 (in worn condition). The Germa examples (**20, 23–27**) should be of similar date. Lamboglia considers the type to be characteristic of the first half of the second century, on the basis of finds from grave-groups at Ventimiglia.[1] Some examples of Type C seem to be contemporary with Type B, for these also occur in the early cemeteries at Germa and Tipasa (see nos. **88–89, 98**). On the whole, though, one may suspect that the type is rather later. Examples of Form 6B were found together with nos. **90–93**.

Type A poses more of a problem, since as far as I know no specimen has been found in a datable context. It should be considered together with Form 2, which shares the same treatment of the rim. Two factors indicate that it may be the earliest version of the form. First, it (together with Form 2) has by no means as wide a distribution as Types B–C, probably indicating that it antedates the general appearance of the ware on the Western market. Secondly, a partial survey of the the pieces of Form 3 in Leiden shows that examples of Type A regularly bear one barbotine leaf more than Type B pieces of the same size, i.e.:

	TYPE A	TYPE B
D. *c.* 18–20	six leaves—3	six leaves—1
	five leaves—1	five leaves—5 (generally well-formed)
		four leaves—11
D. *c.* 14–17½	five leaves—4	four leaves—6
		three leaves—1
D. *c.* 10	five leaves—1	(no examples; cf. **79–86**
(=Form 2)	four leaves—4	—mostly three)

This is borne out by specimens from elsewhere (see listings above). Moreover, the quality of the individual leaves can be seen to decline along with their numbers:

[1] Lamboglia (1958) 267.

the most carefully formed ones are those on Type A and such examples of Type B as bear one leaf more than the average (e.g. the five Leiden dishes noted above and most of those from Tipasa). The latter may reasonably be regarded as transitional pieces in a continuous series. On these grounds, then, it is fairly clear that Type A is the predecessor of Type B rather than merely some rival product. A Flavian or earlier date seems appropriate.

Suggested dates: Type A—*c.* A.D. 60–90. Type B—*c.* 75–150. Type C—early-mid second century (possibly earlier and later).

FORM 4

Lamboglia 5 (also 17), Salomonson A 2 (also A 25B).

Dish with flaring wall bearing mouldings at top and bottom, and an internal moulding at junction with floor; related to Gaulish T.S. form Dragendorff 15/17 (cf. FIG. 1 *d*). Small foot and sloping floor as on Form 3. Groove on inside of rim. Two basic types:

A with a rouletted circle on the floor; occasionally rouletting on the moulding separating wall from floor. A few examples bear a small stamp at the centre of the floor (cf. also Form 5A).

B without rouletting. Broader and shallower than Type A.

Normal size: Type A: D. *c.* 15–19; Type B rather larger (D. up to 21·5). Fairly common.

Examples:

Type A

*1 British Museum 1920.11–18.25. D. 17·0. Rouletting on internal moulding.

2 Leiden H II 24; Holwerda no. 609. D. *c.* 17. As **1**.

3 Carthage, Musée Lavigerie, uncat. D. 16·5. Stamp of *planta pedis* type at centre of floor.

*4 Sebha (Libya) H 30, from Germa. D. 16·6. Normal type.

5–6 Leiden HA 28, H 12; Holwerda nos. 610–611. D. *c.* 16–17. As **4**.

7 Carthage, Musée Lavigerie, uncat. D. 16·9. As **4**.

8 Ventimiglia; Lamboglia (1941) 14, *ibid.* (1958) 268. D. *c.* 16. As **4**.

9–10 Copenhagen ABc 147, 152; *CVA Copenhague* 7, pl. 307. 2–3. D. 15·4, 16·7. As **4**.

11 Copenhagen ABc 151; *CVA Copenhague* 7, pl. 307. 4. D. 16·4. Groove in place of rouletting on floor.

(12 Barumini (Sardinia); *NSc* 1946, p. 199, no. 6, fig. 8. 5. D. 15. Apparently this ware and type.)

Variant

13 Sassari, Coll. Sanna no. 328; Lamboglia (1958) 285. D. *c.* 15·0. Lamboglia's form 17; almost upright wall; rouletting on internal moulding on floor and small circle-motif at centre.

Type B

*14 British Museum 56.12–23.398, from Tharros. D. 17·5.

15 Copenhagen 8059; *CVA Copenhague* 7, pl. 307. 5. D. 19·0.

16 Malta, Rabat Museum, uncat. Fragmentary; est. D. 19.

Uncertain type

17 Sassari, Coll. Sanna no. 174; Lamboglia (1958) 268.

18 Genova-Pegli, Museo Civico, from Libarna; Lamboglia (1958) 268.

For further examples, see Salomonson (1968) 99, 108.

An early form, still related to the South Gaulish T.S. series. Nos. **1–3** and the variant **13** are probably the earliest pieces in the series; the stamp on **3** indicates a close connection with the earliest examples of Form 5. Independent dating-evidence is slight; no. **4** may be Flavian. Type A occurs in association with Forms 3, 5A and 6A on sites in the Fezzan (and elsewhere), and should be more or less contemporary with them. The presence of this form on Italian sites (e.g. no. **8**) suggests that it was in production during the last years of the first century and probably a good deal longer. Type B may be seen as a later development of the form, parallel with Forms 5B, 6B, etc. It appears to be the forerunner of Form 29.

Suggested dates: Type A—late first to early second century (the earliest pieces in the series may go back into pre-Flavian times). Type B—perhaps mid second century.

FORM 5

Lamboglia 18, Salomonson A 8.

Dish with a sloping wall, slight rim-roll; floor and foot as Form 4. The wall is normally slightly offset from the floor. Frequently a groove halfway up wall. Related to the T.S. form Drag. 18 (particularly in its Italian version; see FIG. 1 *b*); successor of Form 1. Three types:

A with rouletted circle on the floor (cf. Form 4A) and groove on inside of rim. Flaring wall, with a slightly concave appearance, bearing a groove. Several examples have a *planta pedis* stamp at the centre of the floor.

B with rouletted circle on floor (as on Type A), and groove on top of rim. Rather steeper wall than on Type A, sometimes bearing a groove.

C a simplified version of the last, without rouletting and rim groove. External wall-groove on some pieces. The rim tends to be rolled and heavier than on the other types.

Normal size: D. *c.* 15–17; also a small size (D. *c.* 12–13). Fairly common.

Examples:

Type A

*1 Leiden H 14; Holwerda no. 603. D. 16·3. Unstamped.

2 Sassari, Coll. Sanna 325; Lamboglia (1958) 285–6. D. *c.* 15·0. *Planta pedis* stamp on floor, surrounded by a groove and rouletting. Lamboglia's form 18/31.

3–5 Carthage, Musée Lavigerie. Three examples seen. D. 15·7–16·2. All stamped.

6 Tipasa, Maison des Fresques cemetery, tomb XIV (object *a*); Baradez (1961) 28, pl. V. D. 16·2. *Planta pedis* stamp.

Type B

7 Leiden HKK 2, from Sfax; Holwerda no. 599. D. *c.* 15·5. *Planta pedis* stamp on floor; slight groove on wall.

*8 London Museum, Layton Coll. P 162. D. 16·3. Groove on wall.

9 Copenhagen ABc 146; *CVA Copenhague* 7, pl. 307. 6. D. 16·7. As **8**.

10–13 Leiden; Holwerda nos. 600–602, 604. D. 15·1–16·7. Holwerda 601 close to Type A.

*14 Sebha H 71, from Germa. D. 15·1. No groove on wall.

15 Sebha H 32, from Germa. D. 16·6. As **14**.

16 Carthage, Lavigerie. D. 15·7. As **14**.

17–18 British Museum 56.12–23.394 and 395, from Tharros. D. 16·1, 16·2. As **14**.

19–22 Leiden; Holwerda nos. 605–608. D. *c.* 12–13. One example (H III NN 3) bears two rouletted circles on floor and a wall groove. Holwerda 608 (HAA 28) is close to Type A.

23 Louvre CA 2813, from Mzara el-Assile, Tunisia. D. 12·9. Wall plain.

24 Carthage, Lavigerie. D. 12·9. As **23**.

25 Copenhagen ABc 763; *CVA Copenhague* 7, pl. 307. 7. D. 12·4. As **23**.

Type C

*26 British Museum 56.12–23.397, from Tharros. D. 17·2. Wall plain.

27 British Museum 56.12–23.396, from Tharros. D. 17·0. As **26**.

28 Florence, Mus. Naz.; Lamboglia (1958) 286, n. 1. As **26** (?).

29 Ampurias 23944; Lamboglia (1958) 286. D. *c.* 13·0. Groove on wall.

*30 British School at Rome, from Eretum area (S. Etruria survey, site 086657). Fr.; est. D. *c.* 15. As **29**.

See also Salomonson (1968) 101–2.

Another early form, related to Forms 4 and 6. Type A, like Form 1, copies the Italian T.S. dish-type Drag. 18, but does not attempt to reproduce faithfully all its features; its foot is of the normal low type. The more flaring wall may indicate that a rather later version of the Italian form is being copied than in the case of Form 1, though this should perhaps not be pressed too far (Form 1 remains something of an oddity). The groove on the wall is borrowed from the Italian type, where it occurs sporadically (generally fairly close under the rim, so R.S. Ware vessels with this feature—such as **1**—may be early). Another obvious borrowing is the *planta pedis* stamp, particularly characteristic of Italian dishes of this shape; almost all the known examples in the African ware occur on this form. Potters' names do not appear on them.

Type B may be a slightly later version of the form; it is certainly commoner than A. No. **7**, which retains a stamp, should be one of the earliest examples of the type. Italian influence seems rather less marked, as is seen in the treatment of the rim. Type C is probably a later development, though the exact place in the sequence of pieces such as **29** is uncertain.

The direct dating-evidence for this form, like Form 4, is rather scanty. Type A

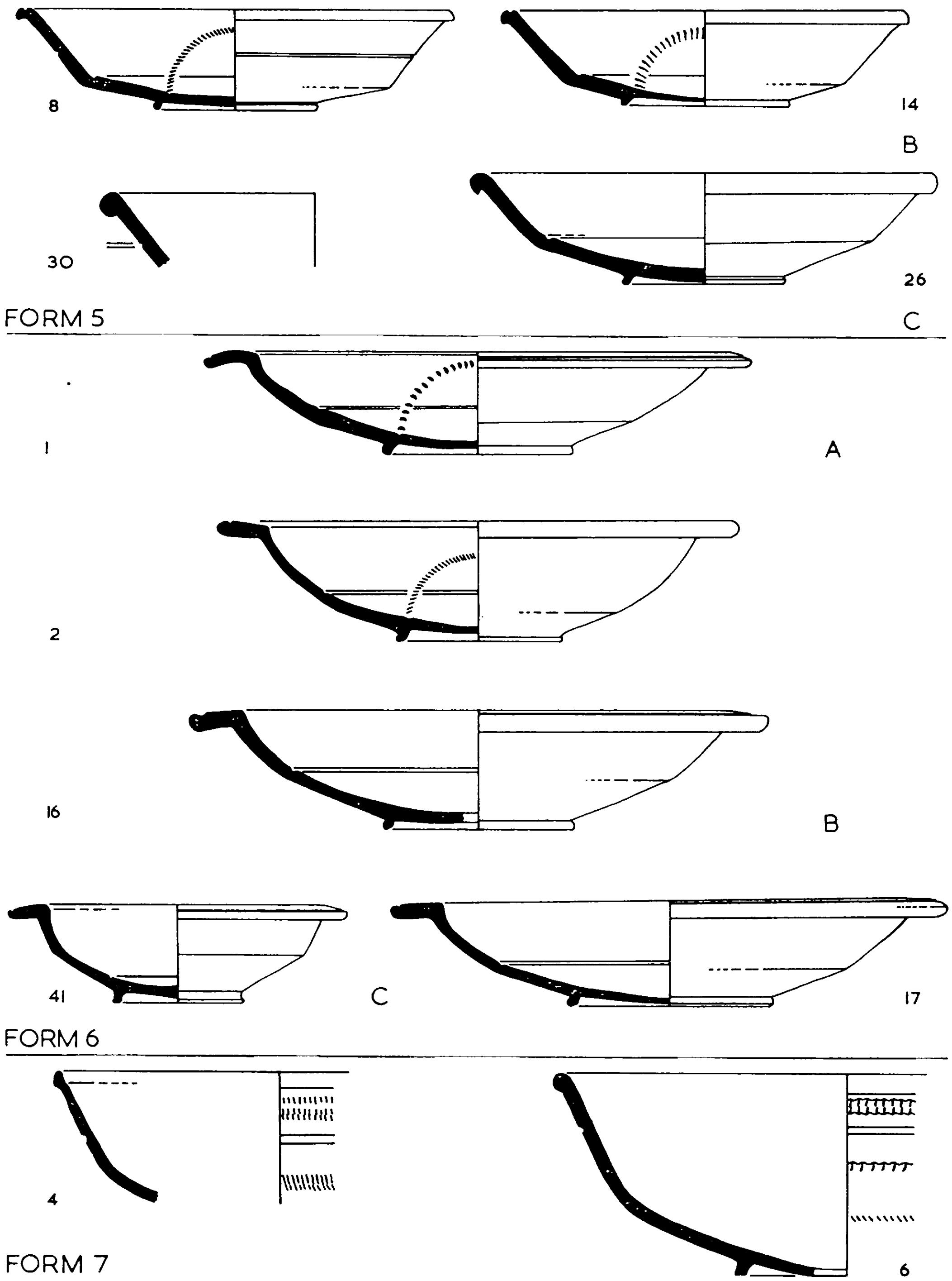


FIG. 3 Scale 2 : 5

should belong to the initial phase of the ware, like Forms 2 and 3A, on account of its rather limited circulation and its stamps—clearly an early feature. One example, **6**, was found in the Maison des Fresques cemetery at Tipasa (probably Flavian-Trajanic). Type B, more widely exported, may be grouped together with Forms 3B and 4A, occurring alongside them at Germa. For Type C no evidence is available.

Suggested dates: Type A—Flavian or a little earlier.
Type B—late first to early second century.
Type C—perhaps mid second century.

FORM 6

Lamboglia 23 (also 24 and 18A), Salomonson A 9.

Dish with broad flat rim, shallow curved body, slightly carinated, and small low foot. The body-form is close to that of Form 3, but with a faint external carination, matched by a corresponding groove on the inside. Rim plain apart from a groove at the lip. Two types:

A with rouletted circle on floor (as Forms 4A, 5A–B).
B plain.

Slightly larger than the preceding forms: D. *c.* 19–22 (cf. Form 3C). Also a small version (sometimes rather deep): D. *c.* 11–12 (cf. Form 3). Common.

A deeper variant of the small type, comparable with some of the bowls of Form 2, may be classified as Form 6C. This is Lamboglia's form 24. The carination on these bowls is more pronounced. D. *c.* 12, H. *c.* 3–4. Uncommon.

Examples:

Type A

*1 British Museum 56.12–23.400, from Tharros. D. 20·4.
*2 Sebha H 73, from Germa. D. 19·5.
3–6 Sebha H 74–76, 96 from Germa. D. 19·3–*c.* 20·2.
7 Carthage, Lavigerie, uncat. D. 19·8.
8–11 Copenhagen ABc 755, 757–759, from Sidi Daoud; *CVA Copenhague* 7, pls. 308. 3–5, 309. 1. D. 17·8–21·8.
12 Copenhagen ABc 125; *ibid.* pl. 309. 2. D. 18·7. Faint external moulding at carination.

For further examples see Salomonson (1968) 102–3.

Type B

13–15 Sebha H 23, 33, 72, from Germa. D. 19·4–19·8. Groove round centre of floor (transitional from Type A?).
*16 Vatican, Museo Sacro 1232. D. 21·5.
*17 British Museum 56.12–23.399, from Tharros. D. 20·7.
18 Ostia 16054. Fragmentary; est. D. 20·2.
19 Copenhagen ABc 756, from Sidi Daoud; *CVA Copenhague* 7, pl. 309. 3. D. 20·3.
20 Ventimiglia (Theatre) 6065; Lamboglia (1958) 291. D. *c.* 21·0.
21 Draria el-Achour (Algeria); Camps (1955) 235, fig. 5. 7. D. 21·0. Camps' type 6.

22 Valencia, from the Cueva de la Pastora; Lamboglia (1958) 291–292 (Form 23b). D. *c.* 19·8. Rather deep, carinated form.

23 Rome, Museo Africano 5150, from Gat (Fezzan), 'Necropoli di Cocamen' tomb 4; Caputo, *Mon. Ant.* xli (1951) 388. D. 21.

24 Rome, Museo Africano 5152, from Germa, 'necropoli meridionale' tomb 21; *ibid.* 341, fig. 129. 1(?).[1] D. *c.* 21.

25–29 Leiden; Holwerda nos. 613–617. D. 17–22. Apparently this type.

30–31 Sassari; two examples noted by Lamboglia (1958) 292.

32 Copenhagen ABc 760, from Sidi Daoud; *CVA Copenhague* 7, pl. 309. 4. D. 16·1.

33 Syracuse; *NSc* 1954, fig. 17.6 (on p. 322). D. *c.* 16.

34–35 Tipasa, W. cemetery; Lancel, *Bull. d'archéologie algérienne* i (1962–65) 61, pl. III, grave Z 1/2–3. D. 15·5, 16·1.

36–37 Sétif, E. cemetery; Février and Gaspary, *Bull. d'arch. algérienne* ii (1966–67) 28, fig. 20 no. 4; p. 32, fig. 24 no. 1. D. 21·4, 18·8. The first of these is listed as an imitation, but the form seems normal.

Small version

38 Cabasse (Var), Nécropole de la Calade; Lamboglia (1958) 291–292; *Gallia* xix (1961), 141, pl. XXIV, no. 134. D. *c.* 11·2.

39 Genova-Pegli 1210, from Ventimiglia; *CVA Museo Civico di Genova-Pegli 1* (*Italia xix*) IV B f, pl. 1. 5; Lamboglia (1958) 291. D. *c.* 11·4.

40 Carthage, Lavigerie, uncat. D. 11·2.

Type C

*41 Louvre, uncat. D. 12·6.

42 Barcelona M. 14, 189, from Ibiza; Lamboglia (1958) 292. D. *c.* 12·5. Lamboglia's form 24.

43 Ampurias 34642; noted by Lamboglia (1958) 292.

44 Ampurias; Lamboglia (1958) 286 (form 18A). D. *c.* 11·0. Variant.

(45 Sousse; Foucher, *La Maison des Masques à Sousse: Fouilles 1962–1963* (Tunis, 1965), fig. 55 bottom (=p. 40, no. 9?) may be a vessel of this type. Fragmentary; D. *c.* 10·2.)

This form should also be included in the early series. It frequently occurs on the same sites as Forms 3–5, with which it has certain features in common. Type A, with its rouletted decoration, belongs to the same class as Forms 4A and 5B. The plain version (Type B), the only one cited by Lamboglia (in 1958), should be rather later than these, as he has remarked, though his late second- to early third-century dating seems too late. **34–35** were found together with a coin of Hadrian (the excavator dates the group 'second quarter of second century'), and **38** with part of a coin of Ant. Pius and a lamp with the stamp C.IVN.ḌṚAC̣ (early–mid second century).

[1] Fig. 129.1 looks more like the piece from Gat (**23**) in profile; this piece may in fact correspond to fig. 129.4. As indicated above (p. 23 n. 1), the published details do not always seem to correspond with the labels on the objects. Two other examples of this type are also published from the same tomb (*ibid.* fig. 129.3–4; the former D. *c.* 26, the latter D. *c.* 20.5). These do not appear to be in the Museo Africano, but may possibly be among the material from this expedition sent to Syracuse.

The dishes **13–15**, with a simple groove on the floor in the place of rouletting, may provide the link between the two types; it is perhaps worth noting that no examples of Type B proper were found in the early Germa cemetery. This type is a contemporary, at least in part, of Form 3C; examples of this form were found in the same group as **24**. Vessels of these two forms are also frequently to be found with a poor dull slip (cf. Forms 8B and 27).

Those vessels which have a marked carination (Lamboglia's form 23b, and the small bowls which here appear as Type C) may well be the latest pieces in the series, as Lamboglia has suggested. How late they continue is still a matter for conjecture.

Suggested dating: Type A—end of first to early second century.
Type B—about mid to end second century.

FORM 7

Lamboglia 7.

Bowl with steep wall curving into a sloping floor; thickened or rolled rim, low foot (as on Forms 2–6). On outside, two or three zones of rouletting, divided by a groove halfway up wall.

Two basic types:

A with two grooves on inside of wall, as on Form 8; rather fine rouletting. Some examples are thin-walled and finely made.

B with plain interior; rouletting generally less fine, in schemes similar to those standard on Forms 8–9. The rim tends to be heavy and rolled, the body more angular.

Size-range: D. *c.* 16–23. Rather uncommon.

Examples:

Type A

1 Albenga (S. Calocero); Lamboglia, *Riv. st. lig.* xiii (1947) 171, nos. 26–27. Two fragments. Thin-walled, with fine multiple rouletting.

2 Ampurias; Lamboglia (1958) 270. Fragmentary; est. D. *c.* 21·6. Heavier; multiple rouletting, confined to upper part of wall.

3 Draguignan (Var), from Les Blais; Lamboglia *loc. cit.; Cahiers ligures de préh. et d'arch.* viii (1959) 95, no. 24, fig. 6. 7. D. *c.* 16·6.

Variant

*4 British School at Rome, fragment from Veii area (S. Etruria survey, site 893554). Est. D. *c.* 16·8. Thin-walled, with fine rouletting; no internal grooves; rim hollowed out on inside.

Type B

5 Barcelona 1923, from Ampurias (?); Lamboglia (1958) 270–1. D. *c.* 16·4. Two zones of coarse rouletting on outside.

*6 Tolmeita (Cyrenaica), in site museum. Fragmentary; est. D. 22. One double and two single lines of rouletting on outside (cf. schemes of Forms 8A, 9A).

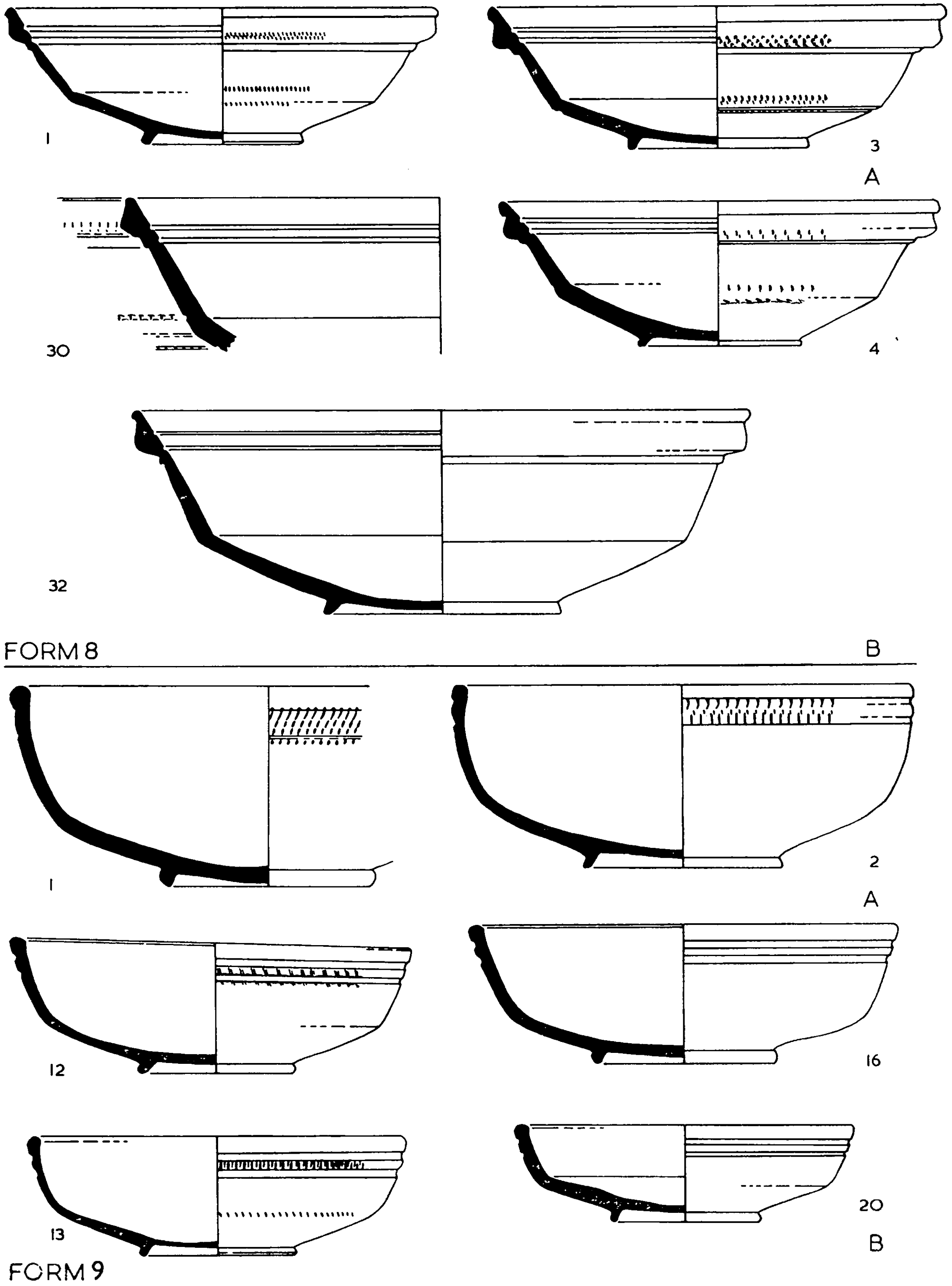


FIG. 4 Scale 2 : 5

Very little dating-evidence, but the form is stylistically related to Forms 8A and 9A. The thinner and finer pieces of Type A (**1**, **4**) are probably Flavian; the Albenga fragments were found together with an early fr. of Form 8, and T.S. and thin-walled wares of this period. Type B is related to the second-century bowl series.

Suggested dating: Type A—Flavian–early second century.
Type B—early–mid second century.

FORM 8

Lamboglia 1, Antioch 843.

Carinated bowl, corresponding to Drag. 29 in T.S. Straight flaring wall, sloping floor and small foot (as preceding forms). Large convex moulding below rim, with a small ridge below, matched by two corresponding grooves on the inside. Two types:

A with rouletted decoration: two or three lines on moulding below rim, single (sometimes double) lines above and below carination (often rather deeply impressed, forming a continuous groove).

B plain. More flaring wall.

Almost all specimens adhere rigorously to these schemes. Some early examples of Type A (as **1** below) are in a thin fabric and have a steeply rising wall and fine rouletting; one may compare the early examples of Form 7A.

Size: Type A: D. 12·5–23 (mostly *c.* 16–18, but some late (?) examples are larger).
Type B: generally larger than Type A. D. *c.* 19–27.

Very common. This and Form 9 are the commonest shapes in the early R.S. Ware repertoire.

Examples:

Type A

*1 British Museum 1965.12–13.1 (ex Towneley Coll.). D. 16·7. Early.

2 Ventimiglia; Lamboglia (1958) 262–3; Lamboglia, *Albintimilium* 32, fig. 8. 12. Fragmentary; est. D. *c.* 17·0. Similar to **1**.

*3 Mainz RGZM O 36336, from Tunisia (Sousse?). D. 17·6.

*4 Sebha H 41, from Germa. D. 16·9.

5 Oxford 1953. 895, from Sphagion, Cyprus. D. 17·8.

6 Köln RGM 35.123. D. 17·1.

7 Mainz RGZM O 11816, from Ostia. D. 16.

8–9 Ostia 16055, 16056. Fragmentary; D. 15·8, 16·0. The first is perhaps early. (Similar, more fragmentary: Ostia 16057–16059.)

10 Carthage, Lavigerie, uncat. D. 16·3.

11 Leiden HK 33, from Lepcis Magna; Holwerda no. 628. D. 13·8.

12–13 Malta, Rabat Museum (**13** from Rabat Roman Villa), D. 16·2, 15·7 (fragmentary).

14–16 Copenhagen ABc 165 b–c, 740 (the last from Sidi Daoud); *CVA Copenhague* 7, pl. 306. 10–12. D. 16·2–16·9.

17 Tipasa, Maison des Fresques cemetery, tomb XXV; Baradez (1961) 41, pl. X. D. 17·0.

18 Lipari, tomb 25; Bernabò Brea and Cavalier, *Meligunìs-Lipára* ii 46, pl. 223. 9. D. 16·8.
19 Panarea; *NSc* 1947, 227, fig. 6. Fragmentary; D. 16.
20 Ventimiglia tomb 19; cited by Lamboglia (1958) 263.
21 Torino, from Ventimiglia; Lamboglia (1941) 10 (form 1a).
22 Menton, from Ventimiglia; Lamboglia (1941) 10–11, *id.* (1958) 262–3 (form 1b). D. *c.* 16·0. Rather rough rouletting (cf. **4**).
23 Syracuse, from el-Abiad (Fezzan); Caputo, *Mon. Ant.* xli (1951) 379, tomb 2 no. 3, fig. 166.
24–25 Cimiez; Mouchot, *Riv. st. lig.* xxix (1963) 138–9, figs. 1–2. Fragmentary; D. 19, 21.
26 Draria el-Achour (Algeria); Camps, *Libyca* iii (1955) 236, fig. 5. 9 (type VIII). D. 21·0.
27 Vatican, from Vulci (?); *Antioch* iv. i 49, fig. 27; Charleston, *Roman Pottery* pl. 24A. D. *c.* 23.
28 Rome (Viminale); *NSc* 1910, 502, fig. 8. Fragmentary; D. 22.
29 Višići; Čremošnik (1962) 119, pl. I, 1. D. 22.
*30 British School at Rome, from Veii area (S. Etruria survey, site 889517). Fr.; est. D. 24. Cf. **25–29** above.
31 Ischia, tomb 174.[1]

Type B

*32 Ostia 16060. Fragmentary; est. D. 23·8. (Profile restored.)
33 Spezia Mus. (coll. Fabbricotti), from Luni; Lamboglia (1958) 262–3 (with ref. cited). D. *c.* 18·3. (Three similar examples cited.) Very debased, with internal grooves in abnormally low position.
(34–35 Ibiza (Sant Antoni); *Ampurias* iv (1942) 152–3, pl. IV.1–2 may be examples of this type.)

The general development of this form is towards a more open and flaring shape, which is matched by an increase in overall size. Some early pieces of Type A (as **1**) have a steeply rising wall; these are thinly potted and bear fine rouletting, like the early pieces of Form 7A. In contrast, Type B has a much more flaring rim, and is more coarsely made; a poor and dull slip, similar to that noted on Form 6B, is a common feature.

This form can be more precisely dated than the preceding ones; it, together with Form 9, is the second-century form *par excellence,* common in deposits of that period from Spain to Greece. Type A occurs already in Flavian contexts: frs. occur, along with South Gaulish wares of the period, at Ventimiglia (str. IV, dated *c.* 90–100; see **2**) and Albenga. No. **20** is from a Trajanic group. The Tipasa piece, **17**, is hardly later than this; no. **4** should also belong to this period. Numerous frs. are present in the basement fill of the South Basilica at Corinth, dating from *c.* 140–150; all appear to be of Type A. A few of these are of the larger size here represented by **26–30**. The presence of frs. of Type A in the Syracuse cistern group (see Form 16.12) suggests that the type survived into the second half of the century.

Type B appears to be a wholly late development; there is no evidence for its

[1] Unpublished; information from D. W. Ridgway.

appearance before A.D. 150. A brief viewing of the finds from Cosa suggests to me that it forms one of a series of later second-century shapes including Forms 9B, 16 and 27. One cannot be more precise.

Suggested dates: Type A–*c.* 80/90–160 +. Fine thin-walled pieces Flavian.
Type B—second half of second century.

FORM 9

Lamboglia 2, Antioch 897.

Bowl with curved body, plain rounded rim and small foot (as preceding forms). Two grooves on outside below rim.

Two types:
- A with band of rouletting between the grooves; occasionally also on lower part of body.
- B plain.

This decoration is more or less standardized, as in the case of Form 8.

Size-range: Type A—D. mostly 15–21.
Type B—in general rather smaller, D. 13–17.

Very common (along with Form 8).

Examples:

Type A

*1 Corinth, C–33–296/1089. Fragmentary; est. D. 19·8. Deep rounded form. Rouletting on a convex moulding.
*2 Sparta, uncat. D. 17·7. As **1**.
3 Copenhagen ABc 122; *CVA Copenhague* 7, pl. 306. 3. D. 20·8. As **1**.
4 Corinth, N. Cemetery; *Antioch* iv.i 50, fig. 26 top (definitive publication forthcoming). D. *c.* 19·2. Similar.
5 Ventimiglia (tomb 27); Lamboglia (1941) 11–12, *id.* (1958) 263–4. D. *c.* 19·8. Similar.
6 Olympia, Stadium (1960). D. 19·5, H. 6·6. Similar, but rather shallower.
7–10 Copenhagen ABc 165g, h, i, 717; *CVA Copenhague* 7, pl. 306. 4–7. D. 15·3–16·4. Normal type.
11 Leiden HKK 3, from Sfax; Holwerda no. 629. D. 17·2, H. 5·6. Similar.
*12 Rabat Museum, Malta, from Rabat Roman Villa. D. 15·4. Similar.
*13 Leiden H III Z 21; Holwerda no. 626. D. 14·2. Shallow form. Extra line of rouletting on lower part of body.
14 Rabat Museum, Malta. D. 14·1. As **13**.
15 Copenhagen ABc 165f; *CVA Copenhague* 7, pl. 306. 8. D. 17·9. As **13**.

Type B

*16 Mainz RGZM O 13761 (ex Rome collection). D. 16·5. Profile as **7–12**.
17 Cabasse (Var), Nécropole de la Calade, tomb 31; *Gallia* xix (1961) 147, pl. XXIX, no. 208. Similar.

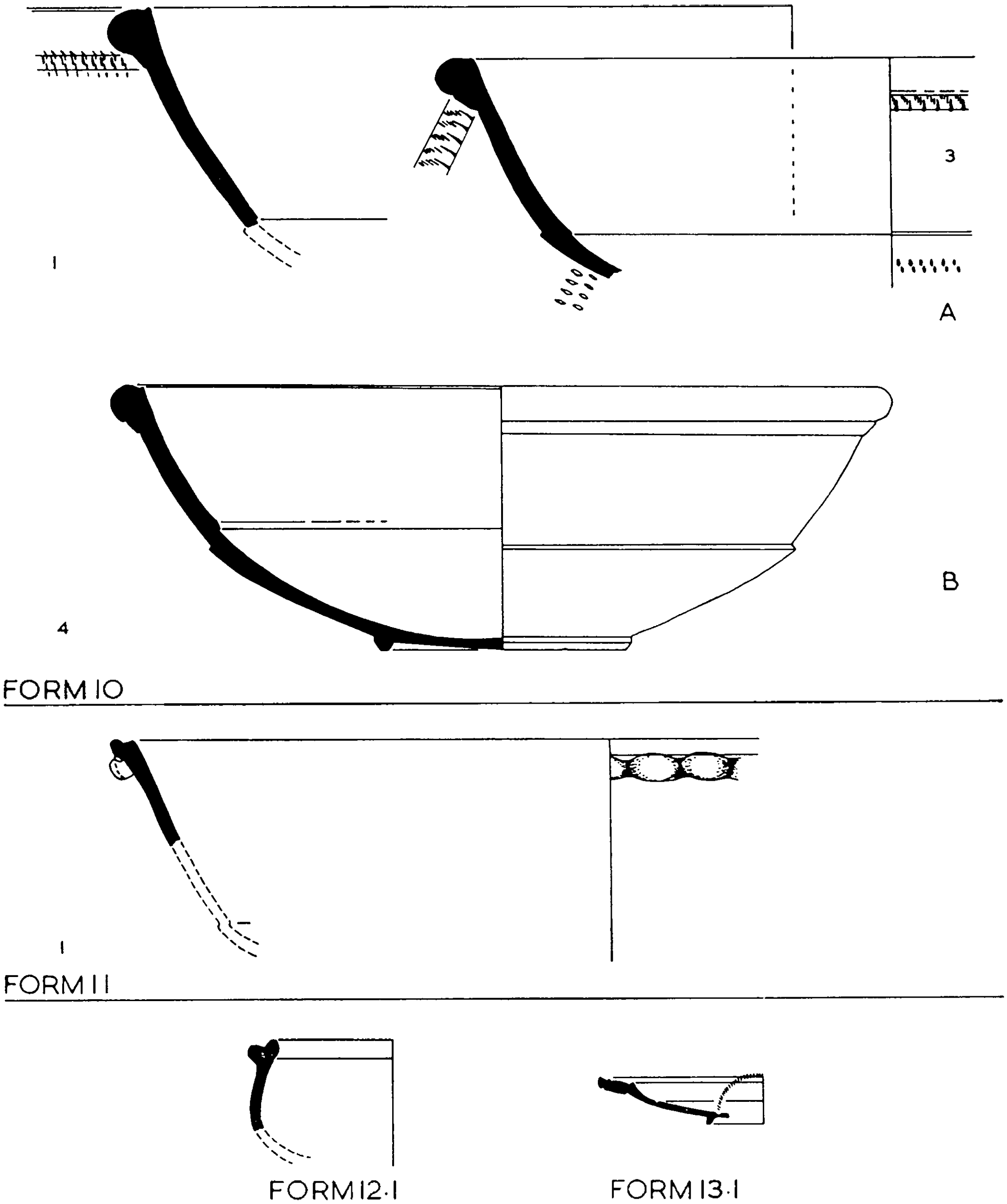


FIG. 5 Scale 2 : 5

18 Ventimiglia; Lamboglia (1958) 263–4 (form 2b). D. *c.* 16·2. Shallower.
19 Menton, from Ventimiglia; Lamboglia (1941) 12.
*20 Ostia 16062. D. 13·1. As **18**, smaller.
21 Ostia 16063. D. 13·4. Similar. Dull slip.
22 Ostia 4558. Similar.
23 Louvre, uncat. D. 13·3. Similar. Dull slip.
24 Ventimiglia; *Albintimilium* 199, fig. 118, no. 1; Lamboglia (1958) 264. D. *c.* 13·4. Similar, with flaring wall. Lamboglia form 2c.

The development of the form is from a deep rounded shape to one which is more shallow and carinated; the latest pieces become in fact dishes, with a profile very similar to Form 16. The earlier pieces of Type A tend towards a rounded rim, with a convex moulding below bearing the rouletting. This scheme is soon simplified, producing the normal arrangement, where two grooves enclose a flat band with rouletting. Pieces such as **13–15**, with an extra line of rouletting on the lower part of the body, resemble the later examples of the type in their shallow profiles, but could represent a smaller version of the early series.

This form is a contemporary of Form 8, and typical of the second century. It seems to come in rather later than Form 8, since no examples are attested in the Flavian groups, where Form 7 may take its place. Its development seems to run parallel with that of Form 8, with Type B superseding Type A in the years around or after 150. One early specimen (**5**) is claimed as Trajanic; a similar one (**1**) comes from the South Basilica fill at Corinth (*c.* 140–150) together with other fragments of Type A. **4** is classed, along with a vessel of Form 3C,[1] as Severan or pre-Severan; a mid second-century date would suit both better. The bowl from Cabasse (**17**) was found associated with a coin of Faustina the Elder (d. 140), and should perhaps be dated close to A.D. 150; in profile it resembles the later examples of Type A, which belong to the same period. A date towards the end of the second century may be postulated for the small shallow version of Type B (on the analogy of Form 16, *q.v.*).

Suggested dates: Type A—*c.* 100–160+.
Type B—second half of second century.

FORM 10

Lamboglia 21.

Large carinated bowl with steep sloping wall and heavy knobbed rim. Normal curved floor and small foot (as on preceding forms). Small external ledge and internal inset at junction of wall and floor. The rim is composed of a large external moulding with a subsidiary flat fillet on the underside; on top, a small lip at the inner edge is normal.

Two types:

A with rouletted decoration on the lower rim-moulding and below the carination.

B undecorated.

For size see individual specimens. Uncommon (no. **4** is the only complete example).

[1] A fr. of this form was found together with the Sparta piece (**2**) and the Çandarli dish FIG. 63 C.

Examples:

Type A

*1 Sabratha (from dump of old excavations).[1] Fragment; est. D. 48.

2 Valencia; Lamboglia (1958) 288–9. Fragment; est. D. *c.* 34.

*3 Ostia 16061. Fragment; est. D. 32. Flat-topped rim.

Type B

*4 Leiden VDB 71, from Tripoli; Holwerda no. 631. D. 27·3. Slip rather dull.

A large companion-piece to Forms 8–9; the development from decorated to plain types appears to match that of these Forms. No direct dating-evidence apart from that cited by Lamboglia, who suggests a rather later date than seems likely.

Suggested date: second century (Type A presumably early, Type B late).

FORM 11

Large carinated bowl. As Form 10, apart from the treatment of the rim. This is slightly thickened, with a groove or ledge on top; below it is applied a frilled (finger-impressed) cordon. Rare; no complete profiles. An unstratified fr. from Sabratha has the carination preserved. D. *c.* 27–35.

Example:

*1 British School at Rome, from Veii area (S. Etruria survey, site 854602). Sherd; est. D. 35.

Date: presumably second century. Relationship to Form 10 uncertain.

FORM 12

Lamboglia 22b.

Small bowl with incurving wall, sloping floor and rim with small external flange; no bases preserved. One fr. (*Libyca* ix. i 118, pl. I, 29) has rouletting similar to that on Forms 7–10 (one line on edge of flange, three on wall). Presumably has a small foot, as the preceding forms. Rare; frs. only.

Examples:

*1 British School at Rome, from Ager Faliscus (S. Etruria survey, site 878823). Fr.; est. D. (over flange) 10·2. Undecorated.

2 Albenga 16273; Lamboglia (1958) 290, form 22b. Fr.; est. D. *c.* 10·4. Undecorated.

No direct dating-evidence; the only clues are those provided by the fabric and the occurrence of rouletting. Presumably second century.

[1] This piece and those with a similar findspot listed below were collected during the course of Dr. K. M. Kenyon's excavations and are, at present, stored in Oxford with the rest of the finds from the excavations.

FORM 13

Small dish, as Form 6, but with flat rim bearing small mouldings along outer and inner edges and stamped decoration between. Groove round edge of floor; rouletted circle round centre. One example only:

*1 Athens, Agora P 9056. Fragmentary; est. D. 11·5. Thin fabric, fine glossy slip.

Date: probably early second century.

FORM 14

Lamboglia 3a–b (also under 22a).

Bowl, with straight sloping or vertical wall, sloping floor, and small low foot; more or less carinated. Undecorated. Three types distinguished:

A fairly deep, with wall sloping outwards, curving into floor. A plain counterpart of Form 9A.
B more open, with vertical wall.
C shallow and open, with low inward-sloping wall. To be classed as a dish (cf. Form 18).

(For other developments, see Forms 15–16.)
Normal size: D. *c.* 16–20. Common.

Examples:

Type A

*1 Corinth, C–62–32. D. 19·4.
2 Torino (?), from Ventimiglia (tomb 9); Lamboglia (1958) 265, form 3a (?=Lamboglia (1941) 12–13, 3c). D. *c.* 17·5. Rather shallower than **1**.
3 Arles; Lamboglia (1958) 289–290 (form 22a). D. *c.* 15·7. As **1**, but with slightly concave walls.
*4 British School at Rome, from Eretum area (S. Etruria survey, site 062667). Fr.; est. D. 22. As **1**.
*5 British School at Rome, from Eretum area (S. Etruria survey, site 078652). Fr.; est. D. 16. Slightly rolled rim.

Type B

6 Bordighera; *Riv. st. lig.* xxiv (1958) 129–131, fig. 10.
7 Draria el-Achour; Camps (1955) 236, fig. 6. 3 (under type IX). D. 20·0, H. 8·3.
*8 British School at Rome, from Veii area (S. Etruria survey, site 845562). Fr.; est. D. 19. High wall (as Type A) sloping inwards.
9 Torino, from Ventimiglia; Lamboglia (1941) 12–13; cf. *id.* (1958) 266, n. 1. (Possibly more than one example.)
10 Virinum (Austria) 8207; Praschniker and Kenner, *Der Bäderbezirk von Virinum* 113, fig. 102. D. 19. Appears to be a vessel of this type.
*11 British School at Rome, from Veii area (S. Etruria survey, site 845562). Fr.; est. D. 16. Tending to Type C.

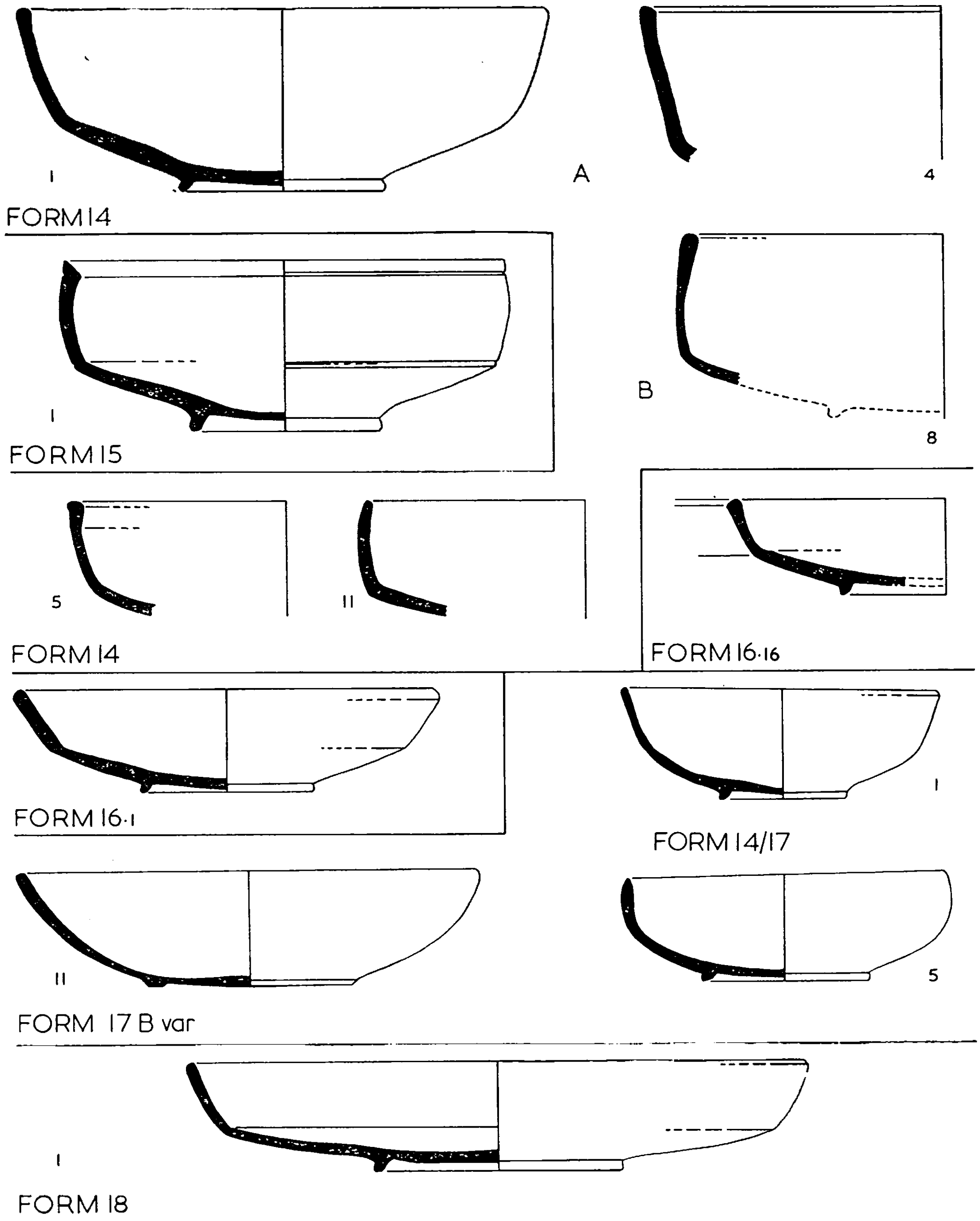


FIG. 6 Scale 2 : 5

Type C

12 Ventimiglia; Lamboglia (1958) 265, form 3b². D. *c.* 15·8.
13 Barcelona 7538; Adroer (1963) 119. Fragmentary; est. D. *c.* 14·2.

Type A is the certainly the earliest version of the form. No. **1** comes from a well-group containing a coin of Antoninus Pius and pottery of the same period; no. **2** is from a context which Lamboglia would date 'not later than 130–140'. The shape seems to be basically mid second century, related to the contemporary versions of Form 9. Type B should be rather later; the example from Bordighera (**6**) belongs to a late second-century group, and further examples of this period appear to be present among the Ventimiglia material (see under **9**). Type C may last into the third century.

Suggested dates: Type A—mid second century.
Type B—second half of second century (*c.* 160–200+).
Type C—late second–early third century (?).

FORM 15

Lamboglia 3b¹.

Carinated bowl similar to Form 14, with thick rim, bevelled on top. Fairly deep-bodied with vertical wall, slightly convex; thick fabric.
Medium-sized (see examples below). Not very common.

Examples:

*1 Mainz RGZM O 11299, from Sousse. D. 16·0. Slight rim-groove.
2 Ventimiglia (Cavalcavia, 1949–51); Lamboglia (1958) 265–6. D. *c.* 17·5.
3–4 Draria el-Achour (Algeria); Camps (1955) 236, fig. 6. 1–2 (type IX). D. 23·6, 23·5. **4** has a slight lip.

A debased version of Form 14. The Ventimiglia piece was found together with a coin of Philip I (244–9).

Suggested date: early–mid third century.

FORM 16

Lamboglia 3c.

Small dish, related to Form 14. Low flaring wall, sloping floor and small low foot; slightly carinated. Undecorated. Cf. the shallower versions of Form 9B.

Size: D. *c.* 13–16·5. Common.

Examples:

*1 London Museum, Layton Coll. P 59. D. 15·5.
2 London Museum, Layton Coll. P 767. D. 16·0.
3 Leiden HFF 3; Holwerda no. 624. D. 16·2.
4–5 Ostia 16064, 16065. D. 13·9, est. D. *c.* 16·2 (fragmentary).
6–7 Copenhagen ABc 165d, 769; *CVA Copenhague* 7, pl. 312. 6–7. D. 14·3, 13·4.

8–9 Barcelona 7519, 7536; Adroer (1963) 118–19. D. *c.* 13·6; est. *c.* 15·0.
10 Torino, from Ventimiglia; Lamboglia (1958) 266 (form $3c^1$). D. *c.* 15·2.
11 Draria el-Achour; Camps (1955) 236, fig. 6. 4. D. 15·1.
12 Syracuse; *NSc* 1954, 322, fig. 17. 4 (on p. 320). D. 14·5.
13 Cagliari; *NSc* 1949, 281, fig. 1. 3. D. 16.
14 Rome, Palatine (near House of Livia); *NSc* 1967, 303, no. 2 m, figs. 20, 24. D. 14·8.
(15 Todi; *CVA Italia xvi*, Todi, pl. 16. 1. D. 13. Appears to belong to this series.)
*16 British School at Rome, from Veii area (S. Etruria survey, site 895623). Fr.; est. D. *c.* 16·0. Two small grooves on underside.
17 Pollentia (Majorca); *Ampurias* xv–xvi (1953–54) 260, fig. 20. D. *c.* 16·5. Rather deep, with near-vertical wall.
18 Tarragona; Lamboglia (1958) 266 (form $3c^2$). D. *c.* 14·5. Shallow variant.

(For a rather larger version (the predecessor of Form 18?) see Salomonson (1968) 104, fig. 18. 3, type A 12.)

Another development of Form 14, parallel to that noted above for Form 9. One of the examples listed above (**13**) was found together with a coin ('Hadrian or one of the Antonines') and a casserole of Form 23 (A/B) in a presumably Antonine group; a second (**12**) in a mid second-century or later cistern group. The form is common at Cosa, in association with such Forms as 9B and 27. It does not appear in earlier second century contexts.

Suggested date: c. 150–200 +.

FORM 17

Lamboglia 8.

Small bowl with curved wall, plain rim and low foot. I propose two types:

A with fairly shallow body and foot of small diameter; wall in some cases slightly flaring, in others slightly incurved. Perhaps a derivative of Form 14.
B more hemispherical in shape, with the foot set further out (D. of foot : D. of rim=*c.* 3:5).

D. *c.* 10–13. Not very common.

Examples:

Form 14/17
*1 Vienna 4286, from Tharros. D. 11·7. Slip rather dull.
2 Sétif, E. cemetery; Février and Gaspary, *Bull. d'arch. algérienne* ii (1966–67) 33, fig. 26, no. 1. D. 11·2. Form similar.

Type A
3 Ampurias 31794; Lamboglia (1958) 272. D. *c.* 12·8.
4 Tarragona, Museo della Necropoli 1324; Lamboglia, *loc. cit.* D. *c.* 11·8. Base more or less flat, with foot marked off by a groove. Flaring wall.
*5 Malta, Rabat Roman Villa. D. 11·5. Rim vertical.

6 Tarragona, Museo della Necropoli 1328; Lamboglia, *loc. cit.* D. (rim) *c.* 11·5. Incurved rim.

Type B

7 Ventimiglia; Lamboglia (1941) 15, form 7a; *id.* (1958) 273, form 8A; *id.* (1963) 155, form 43, second example.
8 Tripoli Mus., uncat. D. 10·8, H. 4·2. Form as **7**.
9 Tripoli Mus., bearing label '335. Sud di B. Fargian (1923).' D. 10·5, H. 4·2. Form as **7**.

Variants

10 Valence; Lamboglia (1958) 289–290, classed under form 22. D. *c.* 11·7. Hemispherical, with outcurved rim.
*11 Copenhagen ABc 165 a; *CVA Copenhague* 7, pl. 312. 2. D. 16·9. Shallow curved form. Poor-quality fabric. Perhaps a provincial version of the ware.

The development of the form is not clear, and the dating-evidence for it is scanty. None of the versions are found in early contexts; a date around the second half of the second century seems probable. A possible link with Form 14 is provided by no. **1** (mid second century?). Type B may be later than the rest; the two Tripoli specimens (**8**–**9**) display a thick bright slip of the kind common on vessels here listed as Severan or later (see Forms 28–33 below).

FORM 18

Salomonson A 20.

Shallow dish, with broad almost flat floor, low steep wall and low foot of small diameter. Thick bright slip. Fairly large (see examples below). Uncommon.

Examples:

*1 Louvre CA 2820, from Kasserine. D. 22·7.
2 Tripoli Museum, from Mdeina Doga (1950). D. 27·0. As **1**.
3 Raqqada; Salomonson (1968) 107, fig. 21. 2. D. 19. As **1**.

Variants

4 Newcastle upon Tyne, from Sbeitla (Brathay exped. 1966). Fragmentary; est. D. 25, H. *c.* 2·4. Very low curved rim. (Possibly local fabric.)
5 Tunis, Bardo, from el-Aouja. D. 26·0. Rather low rim. Fabric rather fine and splintery, slip rather thin and smooth; transitional to that of Forms 48–50.

No direct dating-evidence. Probably of the same period as the large dishes Forms 14C, 29, and 30. The appearance of an example in finer fabric suggests that this is the immediate predecessor of Form 49.

Suggested date: early third century.

FORM 19

Lamboglia 10, Salomonson A 11.

Casserole, with near-vertical wall and rim, separated by a concave moulding, and slightly concave floor, in some cases bearing fine grooves on the underside. Sometimes three stub-feet attached to bottom. The rim is concave on the inside, with a pronounced ledge below. Slip on outside only. For the lid which goes with this form, see Form 20 below. For unslipped version, see Form 194.
Size as examples below.

Examples:

*1 Copenhagen ABc 690 a, from Sidi Daoud; *CVA Copenhague* 7, pl. 307. 1; Kern, *Mnemosyne*[4] xi (1958) 154–5, pl. II. D. *c.* 14·5. Three feet. With lid = Form 20. 1.
2 Leiden HNN 180, from Ksour es-Saf (?); Holwerda no. 687; described in detail by J. H. C. Kern, 'A Roman Terra Sigillata Dish from Tunisia, in Leyden', *Mnemosyne*[4] xi (1958) 152–156, pl. I, with discussion of provenance. D. 13·8–14·2. Three feet; no grooves on underside.
3 Sassari, Mus. Naz., Coll. Sanna 173; Lamboglia (1958) 276. D. *c.* 15·1. Three feet; no grooves on underside.
4 Ampurias; Lamboglia, *loc. cit.* Fragmentary; est. D. *c.* 15·4. Grooves on underside; no feet preserved.
5 Carthage, Lavigerie, uncat. D. 15·9. Three feet; grooves on bottom.
6 Raqqada; Salomonson (1968) 104, pl. II, 5, fig. 18.2.

An early form; an unslipped version appears already at Pompeii (see below, p. 207). A fr. of this form occurs at Ventimiglia along with the earliest examples of R.S. Ware there (*Albintimilium* i 32, fig. 8, no. 15; also p. 36, fig. 9, no. 16; *c.* A.D. 100). Pieces with plain bottoms may be earlier than those with grooved bottoms, a feature shared with the later Form 23.

Suggested date: late first–early second century.

FORM 20

Lamboglia 20.

Flanged lid, of shallow conical form, with small knob, and broad flat rim with small vertical flange below. A raised fillet on body above rim, generally with a small ridge at the junction. Normally rouletting on rim and/or body. Slip on top only, extending down to edge of rim. Used as the lid of Form 19.
Size as examples below. Not common.

Examples:

*1 Copenhagen ABc 690b, from Sidi Daoud, *CVA Copenhague* 7, pl. 307. 1; Kern (1958) 154–5, pl. II. D. 13·6. Lid of Form 19. 1. Rouletting on fillet.
2 Tarragona 4061; Lamboglia (1958) 288. D. *c.* 18·6. Elaborate version: grooves on knob; cordon halfway up body, bearing cable motif, with rouletting between this and the raised fillet; rouletting on rim.

3 Athens, Agora P 22114. D. 15·6. Fragmentary; knob missing. Rouletting on rim and fillet.

4 Tripoli Museum, uncat. D. across bottom 14·5. Fragmentary; knob and top missing. As **3**.

*5 Corinth C-34-90. D. 11·3. Fragmentary. Small simplified version: no fillet; one line of rouletting on rim.

The unusual cable-ornament on **2** may be related to the decoration on Form 13. Presumably of the same date as Form 19. No. **3** comes from an early second-century (Hadrianic?) deposit.

Suggested date: late first-early second century.

FORM 21

Lamboglia 19, Salomonson A 10.

Casserole, with rounded body, short concave neck and low vertical rim; small low foot, as on Forms 2 ff. Rouletting on the rim. Slip on outside only.
D. *c.* 12·5–15·5 or more. Rare; I know of no complete examples other than those published by Lamboglia.

Examples:

1–2 Florence, Mus. Arch. (room XLVII, no. 907); Lamboglia (1958) 287. One illustrated: D. *c.* 12·5. Provided with lids of Form 22 (see below).

3 Valencia; Lamboglia, *loc. cit.* Fragmentary; est. D. *c.* 13·5. Deeper body and shorter neck than the preceding.

*The drawn fr. is a sherd in the British School at Rome from the Veii area (S. Etruria survey, site 862568).

(For further examples, see Salomonson (1968) 103.)

Date uncertain, probably early–mid second century (on account of the rouletting).

FORM 22

Lamboglia, under 19.

Lid, going with Form 21; simple conical form with small knob. On some examples two lines of fine rouletting and small groove at rim; also a plain version. Slip on top only. D. *c.* 12–18. Uncommon.

Examples:

1–2 Florence, Mus. Arch., going with Form 21.1–2; Lamboglia, *loc. cit.* D. of illustrated example *c.* 12·0. Rouletting.

*3 Univ. of Michigan 7001; *CVA Univ. of Michigan 1*, pl. XLV. 23 (illustrated as the lid of a coarse-ware casserole, to which it can hardly have belonged originally). D. 15·6. Small rim-moulding. Undecorated.

Date uncertain, probably early–mid second century (as Form 21). No. **3** may be later.

FORM 23

Lamboglia 10A–B.

Casserole, with outward-sloping wall and slightly rounded bottom, separated by a more or less pronounced flange. The bottom is covered with fine grooves or ridges

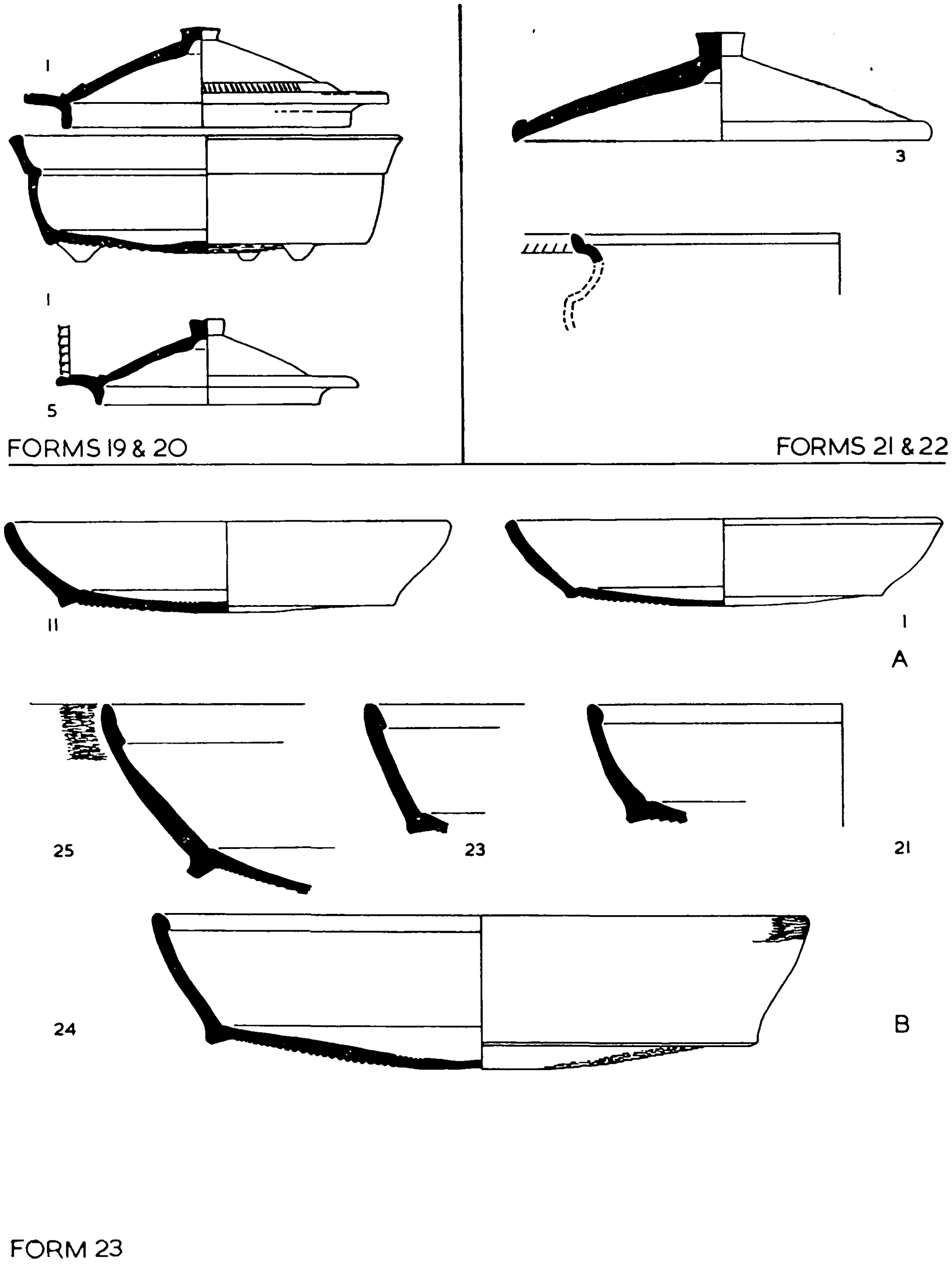


FIG. 7 Scale 2 : 5

(cf. Form 19). Two types, with some intermediate examples. Sometimes a group of narrow grooves on floor; these have a scratched appearance (cf. those on Form 27).

Type A: fairly small and shallow, with plain rim. (Lamboglia 10B.)

Type B: larger and deeper, with more projecting flange, and internal rim-roll (sometimes resembling a flat raised fillet). (Lamboglia 10A.)

The fabric of this form tends to be of rather poor quality, with a thin dull slip (cf. Forms 9B, 27 etc.). The upper part of the outside of pieces of Type B is frequently blackened from irregular firing (indicated on drawings), a feature peculiar to this form.

Normal size: Type A: D. *c.* 14–18. Type B: D. *c.* 20–30. Very common.

Examples:

Type A

*1 Leiden VDB 99, from Tripoli; Holwerda no. 621. D. 16·2. No floor grooves.

2 Sassari, Mus. Naz., coll. Sanna (no number); Lamboglia (1958) 277. D. *c.* 15·4. As **1**.

3 Cornell Univ., bought at Carthage; Waagé (1948) 49, pl. VIII, shape 834. D. *c.* 16·2.

4 Tripoli Mus., from Forte Nord-Ouest (1912).[1] D. 16·7. As **1**.

5 Tripoli Mus., uncat. D. 15·7. Similar.

6–7 Carthage, Lavigerie. D. 16·2, 16·4. Similar.

8–9 Tipasa, Maison des Fresques cemetery; Baradez (1961) 21–22, pls. III, IV (tombs V and VI). D. 16·5 and similar. As **1**.

10 Tipasa, W. cemetery; *Bull. d'arch. algérienne* i (1962–65) 66, pl. III (grave Z8/1). D. 16·6. Similar.

*11 Cambridge, Mus. of Classical Archaeology, CAM 362. D. 16·6. Group of six grooves on floor.

12 Leiden VDB 77, from Tripoli; Holwerda no. 622. D. 17·0. Four grooves on floor.

13 Leiden HK 38, from Lepcis Magna; Holwerda no. 623. D. 15·7. Five grooves on floor.

14–15 Carthage, Lavigerie. D. 15·7, 16·3. Five/six grooves on floor.

16–18 Tipasa, Maison des Fresques cemetery, tombs IX, XI, XVII; Baradez (1961) 24, 26, 32, pls. IV, VII. D. *c.* 15·0–16·0. Grooves on floor.

19 Cagliari; *NSc* 1949, 281, fig. 1. 4. D. 18·6. No floor groove .

Type B

20 Ostia 5363. D. 20·7. Transitional: fairly shallow, with slight rim-roll. Five grooves on floor.

*21 British School at Rome, from Eretum area (S. Etruria survey, site 056659). Fr.; est. D. 19. Similar to last.

22 Ventimiglia; Lamboglia (1958) 277. Fragmentary; est. D. *c.* 19·5. Large rim-roll.

[1] For this site and the finds from it, see Aurigemma (1958). This piece is not mentioned by Aurigemma.

*23 British School at Rome (S. Etruria survey, site 927604). Fr.; est. D. 22. As **22**.
*24 Cosa CG 473. D. 24·5. Similar; six grooves on floor.
*25 British School at Rome (S. Etruria survey, site 935621). Fr.; est. D. 28. Very flaring wall; raised fillet along inside of rim.
26 Rome, S. Prisca; Vermaseren and Van Essen (1965) 480, pl. CXXVIII. 2. D. 34. Upper part of wall blackened.
27–28 Draria el-Achour; Camps (1955) 234, fig. 4. 9–10 (type III). D. 25·2, 25·3. No grooves on floor. Five further examples cited, all of Type B.

This common form has a long life. The general development is from the small Type A to larger versions. Frs. of Type A are present in the early second-century levels at Ventimiglia (see Lamboglia (1958) 277 n. 1), associated with examples of Form 8A. The rather larger vessel **19** was found together with the dish Form 16. 13, and should date from after the middle of the century; of similar date is a vessel from Draria el-Achour (grave B 8), associated with Form 14. 7. The larger pieces (of Type B), such as **24**, should belong to the end of the second century or the earlier part of the third century; the exact limits of this type are very far from clear. In general, Form 23 is frequent on those sites producing examples of Forms 8–9; it is one of the more typical forms of the second century.

Suggested dates: Type A—early–mid second century.
Type B—mid second–early third century.

FORM 24

Salomonson (1968, Tabl. II) XXVIII b.

Plate with broad floor, rising slightly at edge to meet a broad flat rim; low foot of medium diameter. Rim has low mouldings at outer and inner edges; between these, a series of appliqué motifs. Grooves on floor.
Size varies; medium to large. Uncommon; no complete examples.

Examples:

*1 Ostia 4670; Squarciapino (1951) 135, no. 2, fig. 2 top left. Fragmentary; est. D. of rim 25·0, of foot 10·5. Two grooves on outer part of the floor; centre missing. Fishes and a rosette preserved on rim. PLATE I*c*.
2 Rome, Domus Aurea; Toynbee, *Latomus* xvi (1957) 21, pls. I. 5, IV. 2–12. Various rim frs. Appliqués: various animals and trees; also lozenge motifs, etc. Three floor frs. (*ibid.* pl. I. 6 = III. 8 (D. of foot *c.* 16·5), IV. 13–14) appear to go with these; each bears a single appliqué at the centre consisting of a flower surrounded by foliage (all identical).
*3 Malta, Rabat Mus., uncat. Est. D. 27. Two sherds, probably from same vessel. Narrower rim, with moulding at lip only. Appliqué decoration: on one fr., a fish; on the other, a rosette.

Both the rim-form and the decoration are closely matched on the bowls of Form 38 (*q.v.*). A few of Carandini's pieces (*Ostia* i (1969) figs. 68–70) could belong here.
Development uncertain. A coin of Vespasian was found in the same dumped fill

as the frs. **2**; Toynbee suggests a late first–early second century date for the group.[1] However, the lozenge-and-rosette motif found on two of these frs. (Toynbee, pl. IV. 2–3) is similar to that on an early third-century jug from Trier (Form 171. 39; PLATE VIII), indicating a close connection between these plates and the series of third-century forms bearing appliqués. The other pieces listed above do not come from closely dated contexts. The fabric of these is of rather good quality, and bears comparison with that of Forms 35–36.

Suggested date: probably late second or early third century.

FORM 25

Rectangular dish, perhaps with scalloped ends. Mould-made. Flat floor with low foot, low wall, broad flat rim bearing relief decoration. One fragmentary example only:

*1 Ostia 4669; Squarciapino (1951) 133–5, fig. 1. Fragmentary; original dimensions uncertain. L. of side preserved 21. Normal fabric. Rim decoration: fish, baskets and fisherman, with borders of small beads. PLATE I*d*.
On the r. of the photo the wall takes an outward turn, indicating some decorative treatment of the ends of the vessel.

Date uncertain, but presumably second century on grounds of style and fabric. Squarciapino cites a number of stylistic parallels in metalware of the period.

FORM 26

Lamboglia 9b.

Flat-based dish, with curved wall. Small groove on inside below rim; grooves on floor, slight offset marks junction of wall and floor.
Rare.

Examples:

1 Ampurias 36891; Lamboglia (1958) 274. D. *c.* 22·0 (rim).
*2 Rome, American Academy, from S. Maria in Aracoeli. Fr.; est. D. of base 31. Two thin grooves on floor. Slip dull on exterior. Perhaps same form as **1**.

Closely related to Form 27, of which it is perhaps a variant; the treatment of the grooves is similar.

Suggested date: second half of second century + (as Form 27).

FORM 27

Lamboglia 9a, Antioch 835.

Dish with broad flat floor and flaring wall, curving upwards to a more or less vertical rim; low foot close to edge of floor. Smooth transition from floor to wall on inside,

[1] Whether the other frs. from the Domus Aurea group (pieces of rectangular trays with relief decoration) belong to the African R.S. Ware series I cannot say; I have not seen the pieces in question. For this reason they are here omitted. However, close parallels do not seem to occur in any other series. If they should turn out to be African pieces, they might be classed as Form 25; the Ostia piece listed below could then be designated Form 25 *bis*.

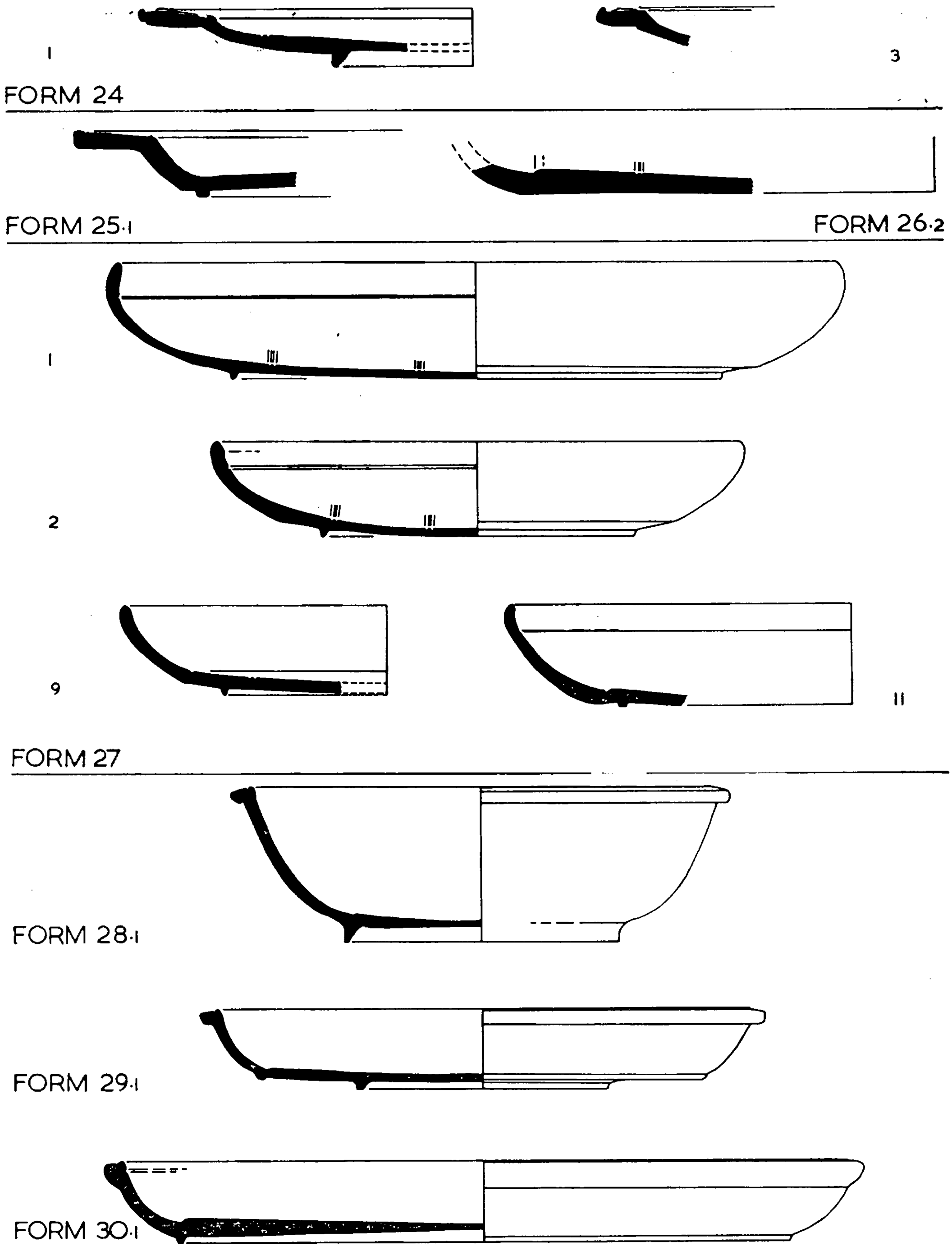


FIG. 8 Scale 2 : 5

slight angle on outside. Groove on inside below rim; two sets of two grooves on floor. Slip normally thin and dull, surfaces slightly pimply (cf. Form 8B etc.). The grooves are narrow, often with a 'scratched' appearance.
Normal size: D. *c.* 20–28. Occasionally larger. Common.

Examples:

*1 Leiden HNN 171, from Ksour es-Saf (?); Holwerda no. 612. D. 26·9 (rim)/27·6 (max.).
*2 British Museum, 56.12–23.401, from Tharros. D. 19·6/20·0.
3 Tunis, Bardo, from Sidi Daoud. D. 20·1 (max.).
4 Copenhagen ABc 767; *CVA Copenhague* 7, pl. 311.5. D. 23·5.
5 Knossos, from German excavations (1942) (?). Fragmentary; est. D. 28 (max.).
6 Copenhagen ABc 768; *CVA Copenhague* 7, pl. 311.6. D. 19·9. No groove inside rim, groove round edge of floor.
7 Tarragona, uncat.; Lamboglia (1958) 275. D. *c.* 18·8/19·4.
8 Rome, Palatine (near House of Livia); *NSc* 1967, p. 303, no. 2i, figs. 22–23. D. (rim) 36. Three pairs of grooves on floor. Similar: *NSc, loc. cit.,* no. 21 (fragmentary).

Variants

*9 Corfu, Roman Baths (1961). Est. D. 20·0 (max.); fragmentary. Normal fabric; form intermediate to Form 31, with slight offset at edge of floor, and plain curving wall.
10 Ventimiglia; Lamboglia (1941) 16–17; Lamboglia (1958) 274 (form 9a). D. *c.* 19·7/20·1. Apparently thicker fabric.
*11 Sabratha (unstratified, from old dump). Fragment; est. D. 25·5/26·0. Bright slip with smoothing-marks (cf. Form 30 ff.). Wall rather high, meeting floor in an offset almost over foot; foot rather broader than usual. Form 27/31?

This is probably the earliest of the series of wide-based dishes which become normal in the third century. In fabric it is similar to a number of late varieties of second-century forms (Forms 8B, 23B etc.). It is common at Cosa, together with such forms as 8B, 9B and 16. Lamboglia cites examples from late second- and early third-century contexts at Ventimiglia and Ampurias. The Knossos fr. (**5**) appears to have been found together with specimens of Çandarli ware of early third-century date. The variants **9–11** have features in common with Severan forms (see Form 30 ff.); these are probably late developments (**9** comes from a context of the first half of the third century). The main period of production would seem to lie still within the second century.

Suggested dates: c. 160–220.

FORM 28

Antioch 826k, Carandini 65.

Bowl with steep wall, curving in at bottom, flat floor and small foot under junction

of wall and floor. Narrow flattened rim, bearing a groove near the inner edge. Small offset at edge of floor, over foot.
Medium size: D. *c.* 16·5–20. Ra~e.

Examples:

- *1 Carthage, Lavigerie. D. 18·6.
- 2 Tunis, Bardo (ex Houdart Coll.). D. 20·0.
- 3 Cornell Univ., bought at Carthage; Waagé (1948) 48, pl. VIII, shape 826k. D. *c.* 19·0.

The general form and thick bright slip of these pieces indicate an early third-century date. For related pieces, see Salomonson (1968) 107–8, form A 23, fig. 22.1–2.

FORM 29

Antioch 826a, Salomonson A 25a.

Dish with broad flat floor, low curved wall and low foot of small diameter. Short flattened rim, sometimes bearing groove near inner edge (as rim of Form 28). Wall marked off from floor by a small external flange, with corresponding inset on inside. A development of Form 4B? Uncommon.

Examples:

- *1, 2 Tunis, Bardo, from el-Aouja. D. 21·2, 27·0.
- 3 Raqqada; Salomonson (1968) 108, fig. 23.1. D. *c.* 22·5.

A late development of the forms of the second century; the fabric is that of the succeeding period (cf. Form 18). One or two fragments occur in Corfu in an early third-century group.

Date: probably early third century.

FORM 30

Antioch 824.

Large dish with flat floor supported on a small foot at its outer edge; low curving wall and knobbed rim. An offset over the foot. Thick bright slip with smoothing marks; rather thick fabric. Uncommon.

Examples:

- *1 Tripoli Museum, uncat. D. 28·5. Slight groove on rim.
- 2 Corfu, Roman Baths (1961). D. of foot est. 20. Base fr. As **1**, but foot rather lower and broader.

No. **2** was found in the early third-century group mentioned above, together with one or two plain knobbed rims which should belong to this form. The fabric seems to be characteristic of vessels of this period.

Date: first half of third century.

FORM 31

Antioch 836 a–k, Lamboglia 40A (?).

Large dish with steep straight wall and flat floor, plain rim, and a small foot of large

diameter. Sometimes two grooves on floor. Slip either as Form 27 or as Form 30. The predecessor of Form 50.
Size: D. *c.* 20–34. Fairly common.

Examples:

*1 Corfu, Roman Baths (1961). Fr.; est. D. *c.* 28·2. Shallow, with rather curved wall (cf. Form 27); low flat foot and sagging floor. Thick bright slip.

*2 British School at Rome, from Veii area (S. Etruria survey, site 904536). Fr.; est. D. *c.* 19·5. Rather small; foot as Form 27.

3 Copenhagen ABc 123; *CVA Copenhague* 7, pl. 312. 18. D. 20·3. Small, as **2**; no grooves on floor.

*4 Corinth C–63–669. D. 28·2. Two grooves on floor. Thick bright slip.

5 Tripoli Mus., uncat. Fragmentary; est. D. 27. As **4**.

*6 Rabat Museum, Malta, from Qallilia (1918). D. 27·8. High steep wall; no grooves on floor. Rather gritty fabric and dull slip.

7–8 Copenhagen ABc 745 and 748 (from Sidi Daoud); *CVA Copenhague* 7, pl. 312. 16–17. D. 28·5,[1] 23·7. As **6**.

9–14 Leiden, from Ksour es-Saf, etc.; Holwerda nos. 689–694; Charleston (1955) pl. 25A. D. *c.* 20·5–24. As **6**.

Variants

15–16 Tunis, Bardo, from el-Aouja and Lemta. D. 32·3, 30·8. Fairly deep, as **6**. Variant fabric, with bright slip on inside and wall only. One/two scratch-like grooves on floor.

The development of the form is uncertain; two fabrics seem to be represented, as is noted above. Some pieces are close to Form 27 in matters of technique, while others have the thick bright slip with smoothing marks typical of a number of third-century dish-forms.

No. **1** comes from the same deposit as Form 27.9 and Form 30.2. A similar fr. from the Athenian Agora (P27175) comes from an early–mid third-century group. The vessel from Corinth (**4**) was found in a well-group together with examples of Corinthian Relief Ware (see p. 412), to be dated *c.* 200–250. There is presumably some overlap in time between this form and its successor, Form 50. **15–16** may represent a final stage of decadence, paralleling the late variants of Form 32.

Suggested date: early–mid third century (**15–16** perhaps later).

FORM 27/31

Two dishes in Tripoli seem to form a distinct type, halfway between Form 31 and Form 27. These are similar in shape to no. **1** above, but have an inward curve at the rim. They have the thick slip and smoothing-marks of pieces such as **1** and **4**. The Sabratha fr. Form 27 no. 11 should perhaps belong with them, though this has the peculiarity of a small groove inside the rim.

[1] The published diameter (38.5) is a misprint, as the size of the photograph shows.

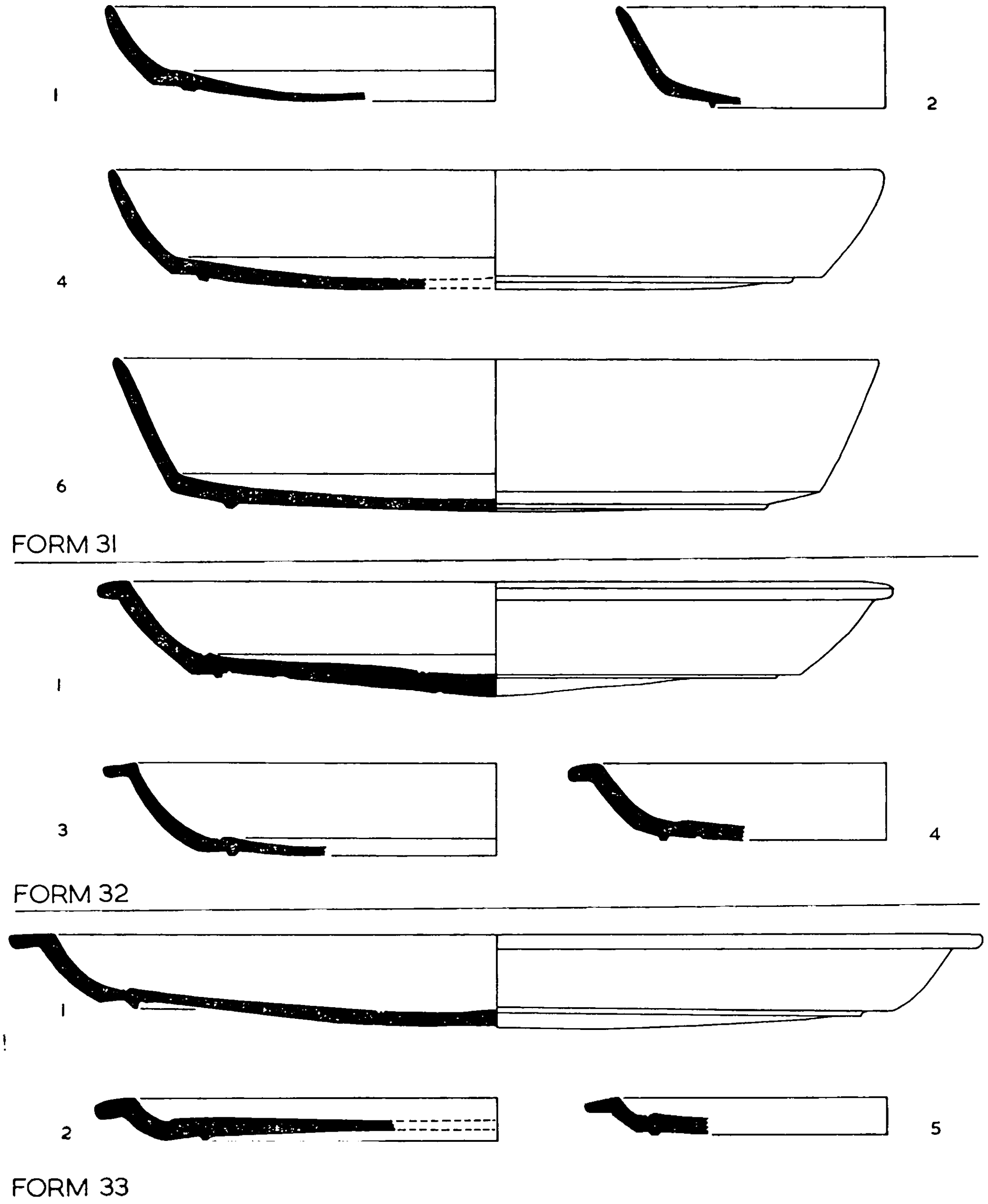


FIG. 9 Scale 2:5

Details:

1 Tripoli Mus., uncat. D. (rim) 31·5, (max.) 32·5. Two grooves on floor.
2 Tripoli Mus., uncat. D. (rim) 30·5, (max.) 31·5. No grooves; otherwise similar.

Presumably Severan or slightly earlier in date. These are perhaps among the earliest examples of the thick-slipped group; they could be the predecessors of Form 31.

FORM 32

Dish with broad flat floor, sloping wall and short flat rim; small foot of large diameter. On the inside, a slight inset at junction of wall and floor; on the outside, the wall meets the bottom at an angle about a centimetre outside the line of the foot.[1] Sometimes grooves on floor (also on underside). Rather thick coarse fabric; thick bright slip.
Rather large: D. as examples below. Fairly common (?).

Examples:

*1 Tripoli Mus., uncat. D. 28·9. Two grooves on floor (also slight grooves on underside).
2 Cyrene (in stores, from Italian excavations). Fragmentary; D. *c.* 31·6. As **1**.
*3 British School at Rome, from Veii area (S. Etruria survey, site 688552). Fr.; est. D. 28·5. Similar.
*4 Athens, Agora P 4208. Fr.; est. D. 23·0. Similar, rather shallower. A groove preserved on underside.

Related in shape and decoration to Form 31; perhaps to be regarded as the successor of Form 30. Some pieces are of abnormally coarse fabric. A number of flat-based dishes in Leiden and Copenhagen (see under Form 58) seem to be a continuation of the type, providing a link with the earliest dishes of the fourth-century series. The Agora fr. (**4**) was found in association with coins running as late as Diocletian, though the piece itself may well be earlier.

Suggested date: early–mid third century.

FORM 33

Lamboglia 41.

Plate. A shallower version of Form 32. The fabric varies. Medium to large size: D. mostly *c.* 30.
Fairly common.

Examples:

*1 Mainz RGZM O 16250 (formerly in a collection in Rome). D. 35·3. Two grooves on floor. Slip rather dull, and surface pimply (cf. Form 31.6 ff.). Pronounced wall.
*2 Sabratha (unstratified, from old dump). Fragmentary; est. D. 29·2. Wall very low. No decoration preserved. Thick bright slip.

[1] Unlike on Form 30, where the wall rises direct from the foot.

3 Ventimiglia, Theatre no. 275; Pallarés (1959: 2) 233–4. Fr.; est. D. 22. Similar.
4 Barcelona 4999; *ibid.*, 234. Fr.; est. D. 23. Similar.
*5 British School at Rome, from Veii area (S. Etruria survey, site 917598). Fr.; est. D. 22. As **2**.

The whole range of third-century fabrics may be found among vessels of this shape. No. **1** is rather abnormal; the standard version is that represented by **2**, with a thick slip similar to that of Form 32. A shallow piece from the Athenian Agora (P 25393) appears to share the same fabric as **1**. Other pieces of similar form are in a finer-quality ware; these are classed under Form 48.

Form 33 should date more or less from the first half of the third century, giving way eventually to the finer version Form 48. No. **3** has been dated to this period; sherds of the type also occur in the Corfu deposit noted above. The Agora fr. comes from a context earlier than A.D. 267.

Suggested date: c. 200–250+.

FORM 34

Lamboglia 6.

Bowl with high vertical wall, slightly bulging, and flat rim; shallow floor, with small foot as on second century forms. Two grooves on wall above carination.

D. *c.* 14–17. Uncommon.

Examples:

1 Nice, from Beaulieu; Lamboglia (1941) 15, *id.* (1958) 268–9. D. *c.* 14·0.
2 Cimiez; Mouchot (1963) 139–140. D. 14.
*The drawn frs. are sherds in the British School at Rome from the Veii area (S. Etruria survey, sites 848576 and 893558).

This form does not appear in early contexts; I suggest a late second- to early third-century date.

FORM 35

Small bowl with vertical wall, flat floor and tiny foot; a small double moulding at the rim, with a groove on the inside; further small mouldings on the underside of the vessel. Relief decoration on the wall, apparently mould-made. One example only:

*1 Louvre AO 6640 *bis*, from Henchir el-Amyah (30 km. S. of Kairouan). D. 7·8. Thin-walled, with good glossy slip. Decoration: lion and panther running towards each other, with a stylized tree between; mask and *thyrsos*, and a second tree. PLATE I *b*.

This piece is clearly modelled on metalware prototypes; in style it is closely linked with the long series of Roman silverware decorated with friezes of animals and Bacchic symbols.[1] Its shape and decorative scheme find close parallels among the third century examples of this series.[2] Cf. also Form 48.11–12.

Suggested date: first half of third century.

[1] For the fundamental study of this series, see F. Drexel, *BJ* cxviii (1909) 176–235.

[2] Especially the Valence bowl, Walters, *BMCat. Silver Plate* (1921) 20, fig. 24, no. 75. The composition, with its pair of animals flanking a tree, is a development of the very freely composed style of the second century (cf. the trays noted above, p. 49 n.) and the predecessor of the crowded and more strictly balanced schemes found on fourth-century pieces (esp. Drexel form 4).

FORM 36

Lamboglia 6, variant. Salomonson (1968, Tabl. II) XXIV.

Deep bowl, similar to Form 34, but with a higher, more vertical wall, and a simple moulded rim. Appliqué decoration on the wall, fairly sparsely applied. Rather thin-walled; fabric rather good-quality.
For size, see examples below. Rather uncommon.

Examples:

1 Valencia, Museo del Ayuntamiento, from Plaza de la Reina (1958); Lamboglia (1958) 269; Pallarés (1959:1) 125–127, with fig. in text. D. *c.* 14·4. Fragmentary. Appliqués: Pan l., feline r., wrestler r., stag r., four dividing-ornaments in the form of hanging loops.

Variant

2 Ventimiglia, Theatre; Pallarés, *op. cit.,* 127–8, fig. in text. Two sherds; est. D. *c.* 12·5. Shallower form, with wall sloping inwards and everted rim (cf. Form 34). Appliqués: on one fr., human head (upside-down); on the other, part of an animal.

Date: probably as Form 35; to be classed together with the series of closed vessels with appliqué decoration (Forms 171–9).

Suggested date: first half of third century.

FORM 37

Bowl, with convex wall, surmounted by a short concave neck and vertical moulded rim; shallow curving floor and small foot (as on preceding forms). Appliqué decoration on wall. One example only:

1 Tunis, Bardo, from Bir Halima; *Cat. Alaoui* (1922) 309, no. 1152; Merlin, *BAC,* 1914, CXLVIII-IX; *Tunisian Exhibition* no. 57, fig. n;[1] Salomonson (1968) Tabl. II, XXIII. D. 18, H. 12. Granular fabric of medium thickness, poor slip, on outside and rim only. Small mouldings at carination and on underside. Appliqués: four motifs, separated by vertical dividers in the form of four superimposed palmettes: (1) rape of Proserpina, (2) woman fleeing before a lion, (3) chariot with figures (? Proserpina's arrival in the Underworld), (4) small winged animal r. and reclining river-god l.

Clearly part of same series as Form 36; the small mouldings around the lower part of the body suggest a connection with Form 35 also. For a possible lid, see Form 146.

Suggested date: first half of third century.

FORM 38

Deep bowl with rounded body, slightly incurved below rim, and broad flat rim; foot probably as on preceding forms. Rim bears small mouldings at lip and inner edge; between these, a series of applied motifs.

[1] American ed., no. 63.

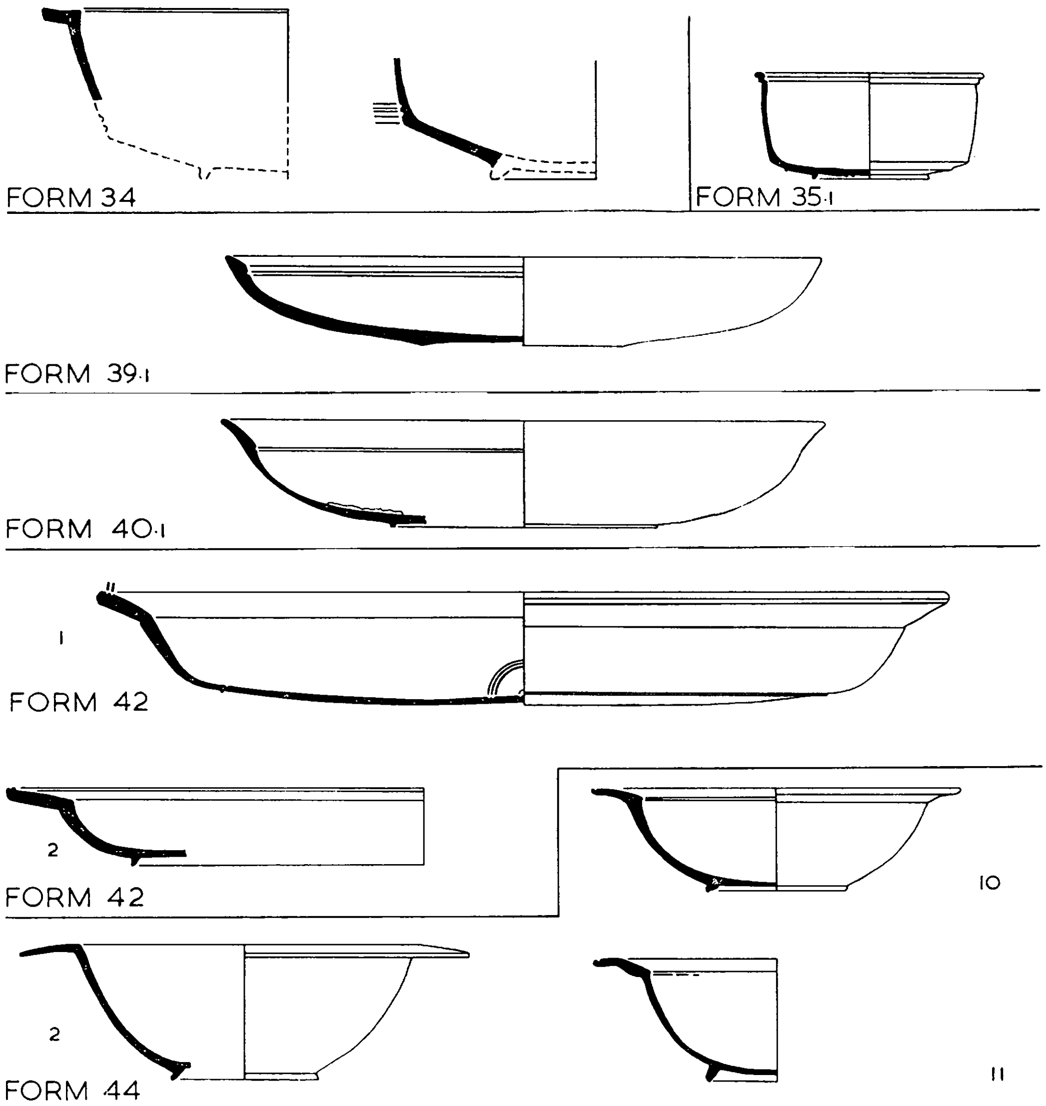


FIG. 10 Scale 2 : 5

D. about 13–18 (possibly also larger).
Rather uncommon; fragments only.

For examples, see *Ostia* i (1969) 53, figs. 61–76 and pl. LV, 674–88 *passim.*[1]

Related in fabric, form and decoration to the preceding forms; for the corresponding plate-form, see Form 24 above. The Ostia fragments, from a context of *c.* 240, indicate a date in the first half of the third century (or possibly slightly earlier).

FORM 39

Salomonson (1968, Tabl. II) XXVII.

Shallow bowl/dish with curving body, flat base and plain rim, bevelled on inside. Groove on inside below rim; appliqué decoration round floor.
Rare; only one complete example:

*1 Louvre AO 6562, 'trouvé entre Sousse et Kairouan'; *CRAI*, 1913, fig. 2 on p. 442; Salomonson (1969) fig. 89. D. 20·2. Brilliant vermilion gloss inside and outside; faintly pimply surface. Three appliqués: (1) cupid with purse, running l.; (2 and 3) three figures before an altar.

This piece shares motifs with the series of closed vessels with appliqué decoration (Forms 171–9). There are a few frs. of similar vessels among the finds from Cosa (CF 1688 and others); these should be no later than *c.* 240, when the site appears to have been more or less abandoned.

Suggested date: first half of third century.

FORM 40

Shallow bowl, related to Form 39, with wide outcurved rim and tiny foot. Groove on inside where rim meets body; appliqué decoration round floor.
One example only:

*1 Sparta Museum (in stores), from Theatre excavations, 1924. D. *c.* 20·3; fragmentary. Very fine thin ware, brownish-maroon in colour, with thin smooth slip all over. Appliqués: a figure squatting r., holding an axe-like object with both hands, edge of a second figure preserved; originally probably four motifs.

Related to the preceding forms, also to Form 45. This may be the earliest example of the fabric which characterizes Form 45 and the later Form 68. Two sherds in Trier come from a vessel of similar type.[2]

Suggested date: early–mid third century.

FORM 41

Large bowl with curved body, broad flat rim and small foot. Rouletting on rim and floor, and appliqué decoration round inside. One example only:

[1] Of these, figs. 68–70 perhaps belong to Form 24.

[2] Landesmuseum 13873a and b; found in the city. Frs. of wall with edge of rim. Rim flatter (angle as Form 45?), with rouletting; groove at junction with body. Appliqués on inside: part of lion(?) l.; part of bull moving l. (head frontal)—perhaps from a *venatio* cycle. Cf. also Form 41.

1 Tunis, Bardo, from el-Djem; Merlin, *BAC,* 1910, CCXLI, no. 3; also *ibid.,* 1915, CLXXVII–VIII; *Cat. Alaoui* (1922) 319, no. 1213; ref. Salomonson (1960) 53 n. 171; *id.* (1969) fig. 94. D. *c.* 27·0, D. of foot 11·4, H. 6·5, W. of rim 3·3. Over half preserved; restored. Fine thin ware, similar to that of the better examples of Form 45; brilliant deep red slip (closely resembling that of much Gaulish T.S.), covering the whole of the vessel. Rim faintly convex, with faint trace of rouletting, and two fine grooves at lip. Two rows of fine rouletting on floor. Five appliqués round inside: lion leaping r.; large leaf; *tabula ansata* bearing inscription PERE, below a wreath; maenad (?); satyr with Pan-pipes.

This fine piece is closely related to the series of closed vessels bearing mottoes (Form 171.44–47 and Form 172.25–26), and to the earliest examples of Form 45.

Suggested date: c. 225–250.

One may note here another bowl, briefly described by Merlin, which should belong to the same series as Forms 39–41. I have not seen the piece. The details are as follows:

(Tunis, Bardo (?)), from Thapsus; Merlin, *BAC,* 1920, CXVIII–CXIX. Bowl, fairly shallow, with rim missing. Round the interior, five appliqués: (1) fish on a five-pronged support; (2–5) *venatores* wrestling with mule or horse, bull, bear and boar respectively. At centre of floor, a *tabula ansata* bearing the words PENTAPI/ NIKA.

FORM 42

Large dish with flat cut-out handles. Broad flat floor, low sloping wall and broad flat sloping rim; tiny foot under outer part of floor. Rim widens out at each end to form a broad flat grip-handle with symmetrical fretted edge (cf. Form 51B). Undecorated except for a few grooves. Fine thin ware with thin glossy slip all over.

One example:

*1 Tunis, Bardo, from Haidra; *Cat. Alaoui* (1910) 313, no. 698; *Tunisian Exhibition* no. 49, fig. f (longitudinal profile). L. over handles 38·2, transverse D. 28·7. Ends and handles slightly pulled out and down (H. at tips 3·5). Fine grooves on rim (continuous) and at centre of floor, and slight offset with groove over foot.[1] (Transverse profile shown here.)

An early version of the fine-ware series represented by Forms 48–50, distinguished by its complete slip-coating. Salomonson suggests a date in the first half of the third century for the Haidra example; on grounds of fabric it can hardly be later than *c.* 250.

The following fr. may also belong to this form:

*2 British School at Rome, from Veii area (S. Etruria survey, site 859593).

[1] Not indicated in Salomonson's drawing.

Fr.; est. D. 28. Small double moulding at lip (cf. *Dura* iv.i.2, no. 93, on early examples of Form 45). Ware as **1**.

Suggested date for both pieces: c. 220–240/50.

FORM 43

Lamboglia 4/46.

Small deep bowl, with straight flaring wall, flat floor and broad flat rim; thin flaring foot of medium height. Thin fabric; fine glossy slip all over. Rare.

Examples:

1 Ostia 16178 (?); Lamboglia (1963) 156–7. D. *c.* 11·0, H. *c.* 4·5.
2 Tunis, Bardo, from el-Aouja. D. 11·4, H. 5·0.

Closely related in form and fabric to the finer pieces of Form 44, of which it could be the predecessor. No direct dating-evidence.

Suggested date: first half of third century.

FORM 44

Lamboglia 35, Antioch 848, Salomonson, C5, C10.

Small bowl of hemispherical shape with broad flaring rim, slightly convex, and small low foot. Sometimes a groove at lip. Cf. Forms 45–46.

Normal size: D. *c.* 12–15. Common in Tunisia, rather uncommon elsewhere.

Examples:

1 Syracuse; Lamboglia (1963) 154. D. *c.* 12·2. Form close to Form 43; deep body, with thin flaring foot, rim almost flat.
*2 Sparta, uncat. Fragmentary; est. D. 15·2. Rim almost flat.
3 Sassari Mus., Coll. Sanna 356; Lamboglia (1963) 154. D. *c.* 12·0. Similar.
4 Leiden H III Z 20; Holwerda no. 627. D. 14·8. Thin ware with pimply surfaces and slip as on second-century wares. Rim fairly flat, drooping a little at lip; low foot, roughly finished.
5 Carthage, Lavigerie. D. 15·1. Similar to **4**.
6 Ostia; Lamboglia (1963) 154. D. *c.* 12·3. More convex rim (cf. Form 46).
7 Tunis, Bardo, from La Skhira (no. A 45). D. 14·1. As **6**.
8 Athens, Pnyx; *Hesperia* xii (1943) 371, fig. 65. D. 11·8. Fine thin ware.
9 Tunis, Bardo, from el-Aouja. D. 12·1. Fabric similar to **4**. Rim as **6**, with faint groove at lip.
*10 Louvre CA 2812, from Bir bou Yahia, Tunisia. D. 12·5. Rising rim, with groove at lip (cf. Form 45C).
*11 Rabat Roman Villa, Malta, uncat. Fragmentary; est. D. 12·4. Fine fabric. Rim as **10**, but thinner higher foot.
12 Tunis, Bardo, from La Skhira. D. 13·4. As **10**.

Variant

13 Tunis, Bardo, from el-Aouja. D. 12·8. Rim horizontal, bearing two grooves at lip and broad raised fillet down the middle; edge of lip

bevelled, bearing a groove (cf. Form 52B). Low triangular foot (cf. Form 45). Fine finish; bright dark slip all over, with 'twig-marks' on underside.

For further examples, see Salomonson (1968) 117, 119–20; for a variant with applied decoration see *ibid.* Tabl. II, form XXVI.

This form occurs in more than one fabric. Most pieces are in the fine ware typical of Form 45, but a small number (e.g. **4**, **5**, **9**) display a coarser fabric and poorer slip similar to that of Form 31, nos. 6–14, and some pieces of Form 33. All are fairly thin-walled, and the slip in all cases covers the whole of the vessel.

The close connections in form and fabric with Form 45 suggest a mid-late third-century date. One example, **8**, comes from a deposit of 267 or thereabouts. The Sparta piece, **2**, is from a site which produced third- and early fourth-century material. The foot of a bowl similar to **1** was present in the same mid third-century group as Form 40. 1. [Note: For earlier dated examples, see now *Ostia* i (1969) 54.]

Suggested date: c. 220/40 to late third century (or slightly later).

FORM 45

Lamboglia 42, Antioch 812, Salomonson C3, C4, C7.

Large bowl, with shallow curving body and broad flat rim, rising obliquely; flat base, with a shallow triangular foot at the edge marked off by a slight inset. Generally thin-walled.

Three types:

A with bands of fine rouletting on rim and floor, and fine groove(s) at lip, and sometimes on underside of rim. Salomonson C7.

B plain, with grooves on rim and floor (and sometimes under rim). Salomonson C3.

C as B, but with rim drooping at edge, giving a slightly hooked appearance. Grooves at lip and on floor. Salomonson C4.

Size-range: D. 21–40. Types A–B: D. mostly 28–36, with small size *c.* 21–22. Common.

Examples:

Type A

1 Calvatone (Lombardia); Lamboglia (1963) 152–3. D. *c.* 36·5. Broad bands of fine rouletting on rim and floor.

*2 Athens, Agora P 3001/26547. D. 28·9. Fine slip with mottled appearance.

3 Athens, Agora P 3060; Robinson (1959) 60, K 3, pls. 12, 64 (reproduced by Lamboglia (1963) 152–3). D. 33·6. Ware and decoration as **2**.

4 Copenhagen 12356, from Aegean region (?). D. 20·7. Similar, smaller.

5 Toronto 925.74.1, from Saloniki region. D. 21·9. Good red slip. Single lines of rouletting on rim and floor.

6 Tunis, Bardo (ex Houdart Coll.). D. 28·0. Slip slightly thicker and darker than the above. Decoration as **5**.

7 Rome, Palatine (near House of Livia); *NSc* 1967, 304, no. 2 n, figs. 20, 24. D. 28.

Type B

8 Tunis, Bardo (ex Houdart Coll.). D. 28·1. Fine thin ware with mottled slip, as **2** above. One fine groove at lip, one on floor, one under rim (as on **9**).

*9 Athens, Agora P 17057. D. 29·4. Dull brownish slip. Extra groove under rim.

*10 Athens, Agora P 21685. D. 21·2. Fine ware with mottled slip, as **2**. No groove on rim.

11 Jerusalem, Palestine Museum (*Gallery Book*, no. 1352), from ez-Zib (?). D. 35·3.[1] Brownish slip. Three grooves on floor.

Type C

12 Sousse Museum. D. *c.* 26 (?). Broad groove on floor, flanked by two lines of rouletting.

13 Carthage, Lavigerie. D. 37·0. Good brownish-red slip; 'twig-marks' on underside. Two grooves on floor.

14 Carthage, Lavigerie. D. 23·6. Ware as **13**. One groove on floor.

15 Tunis, Bardo. D. 26·5. Shallow variant, with rather short rim. Smoother fabric, with thin smooth slip (cf. ware of Form 51). Two grooves on floor.

16 Rome, Palatine (near House of Livia); *NSc* 1967, p. 304, no. 2 o, figs. 20, 24. D. 24. Apparently this type; flat base (?). Two grooves on floor.

*The drawn fr. is from the Sbeitla area (Brathay Expedition, 1964, site 65A). Est. D. 35.

For further examples (all types), see Salomonson (1968) 116–18.

Type A is early, Type C late. A few of the earlier vessels have a fine glossy red slip similar to that of Form 41; more common is a slip of mottled appearance. The later examples of Type B and those of Type C have in general a duller slip with a brownish tinge; their hard-fired cleanish fabric suggests a connection with Form 68, as does the unusual decoration on **12**. A feature common to both of these forms is the appearance on the bases of small twig- or grass-impressions.

The earliest-dated examples of the form are two rims of Type A and a probable base from Dura-Europos,[2] which should antedate the destruction of the city in 256.[3] The two rims bear fine feather-rouletting (as on **1**), and the mottled slip is present. The form is well represented, in varieties A and B, in the levels connected with the Herulian destruction of 267 in the Athenian Agora; here it is second only in

[1] Information from Mr. D. Barag.

[2] Rims: Yale 1934.433a and 1938.4986 (2 frs., same vessel), and 1934.715A; Cox, *Dura* IV. i. 2, p. 15, pl. V, nos. 92–93 respectively; also Charleston (1955) pl. 13B. Cox, *op. cit.* 16, no. 94 (Yale 1938.4975 and 4988) appears to be a typical base of this form; I was unable to locate the third fr. (Yale 1938.4989) cited by Cox, which purports to be the rim of this piece (see published profile), but strongly suspect that it does not belong here. The piece has the typical small inset separating foot from base (not readily visible on the published drawing).

[3] This date rests on the coin-evidence from the site, published by Bellinger, *The Excavations at Dura-Europos, Final Report* vi (1949).

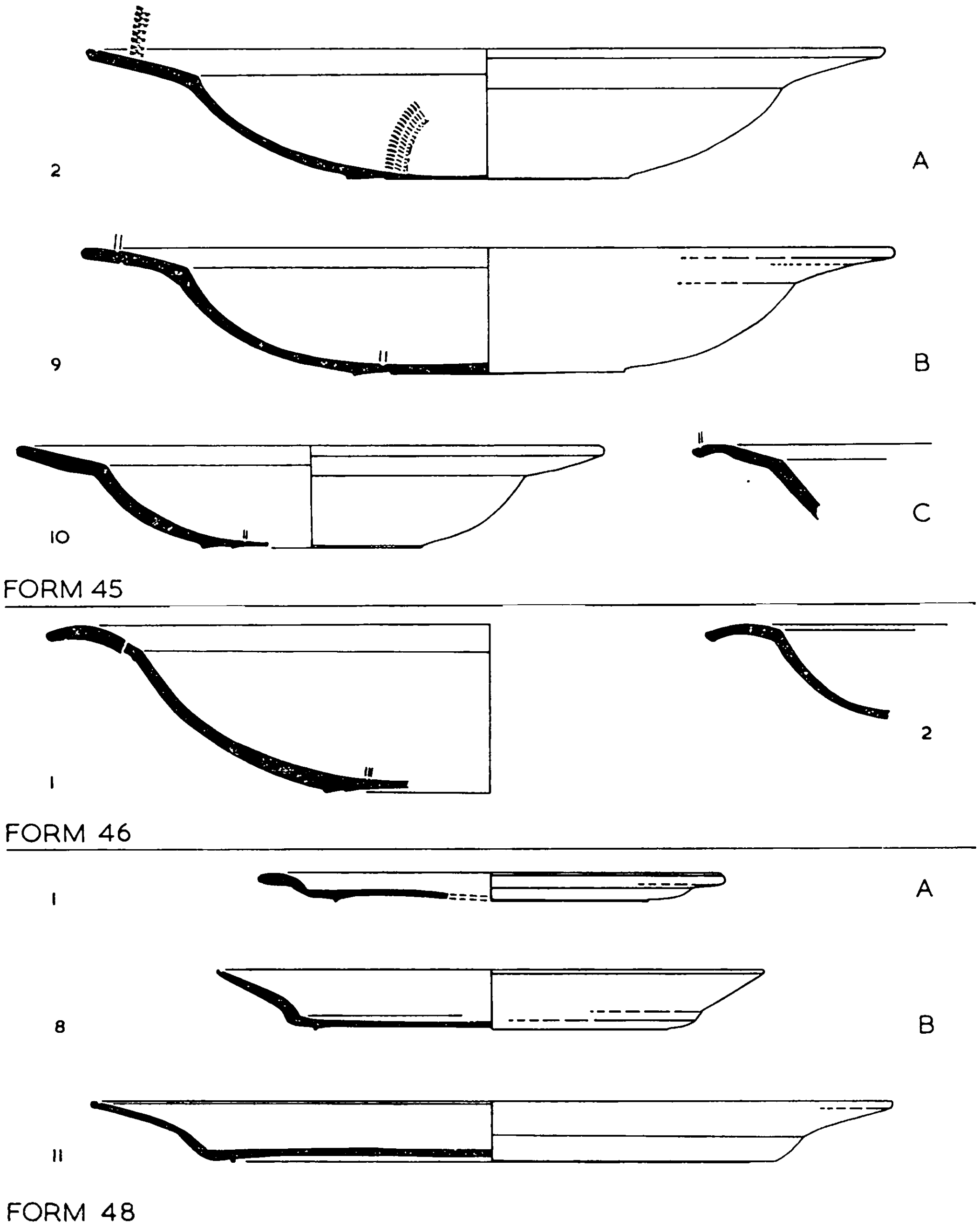


FIG. 11 Scale 2 : 5

frequency to Form 50. Nos. **2**, **3** and **10** come from these deposits. Most of these pieces are thin-walled, and display the glossy or mottled slip. Sherds of Types A and B are also present in the levels of the late third and early fourth century; here the coarser varieties with the dull slip make their appearance. **9** is one such piece, though it does not come from a good context. Type C does not occur in any of these groups, so may be presumed to be of later date.

[For earlier dated examples of Type A, see *Ostia* i (1969) 58.]

Suggested dates: Types A and B—*c.* 230/40–320 (A mostly early).
Type C—early–mid fourth century.

FORM 46

Large bowl, as Form 45, but with broad curving rim (cf. some examples of Form 44). Fabric as the later examples of Form 45, with rather thick, dull slip.
Size: as Form 45. Uncommon.

Examples:

*1 Sbeitla, from town site (Brathay Expedition, 1962; now in Belfast). Est. D. 32. Fragmentary; profile restored from two frs. (probably same vessel). Two fine grooves on floor.

*2 Athens, Agora P 27058. Fr., est. D. 35.

The Agora fr. comes from the same dump as Form 58.9, but at a lower level; the latest associated coin is one of Diocletian. A fr. of Form 58 was found with it. The form is closely related to the later examples of Form 45B.

Suggested date: last quarter of third–first quarter of fourth century.

FORM 47

Plate. A shallow version of Form 45, with the typical base; rim almost horizontal, only slightly raised above the floor (cf. Form 48). One example only:

1 Tunis, Bardo, from el-Aouja. D. 23·4, H. 2·3. Fairly thin fabric; fine slip of mottled variety, rather dark. One groove at lip, three grooves on floor.

Probable date: mid–late third century.

FORM 48

Lamboglia 41, Antioch 807, Salomonson C 8.

Plate with broad flat floor, from which springs a convex everted rim; sometimes a slight wall. Minute bevelled foot under outer edge of floor. Thin ware (*c.* 2–4 mm.), hard and pure, with sharp breaks, sometimes splintery. Surfaces carefully smoothed; close-set fine turning-marks often visible on outside where rim meets base. Normally one small groove at lip. A finer version of Form 33. Two types:

A with more or less horizontal rim. Slip generally bright and glossy, covering the whole vessel.

B with obliquely flaring rim and a slight wall. Thin smooth slip, generally

matt, and covering inside and rim only; base merely smoothed. Fine brush-marks may be just visible on floor. A couple of specimens bear appliqué decoration (**11–12**).

Size-range: D. *c.* 17–50 (mostly *c.* 17–20 and 25–36). Fairly common.

Examples:

Type A

*1 Athens, Agora P 21648. D. 16·9.

2 Ampurias 30.048; Lamboglia (1963) 151. D. *c.* 20·3; fragmentary.

3 Glanum (Musée de St. Rémy) 5017; referred to by Lamboglia (1963) 151.

Variant

4 Tunis, Bardo, from el-Aouja. D. 24·7. Variant fabric, similar to that of Forms 44–45: brownish slip, with a few 'twig-marks' on base. Two pairs of scratch-like grooves on floor.

Type B

5 Antioch excavations; Waagé (1948) pl. VIII, shape 807k (= 807f in text). D. *c.* 32·8, H. *c.* 1·6. Transitional; rim of quarter-round profile.

6 La Alcudia (Elche); Ramos Folqués, *Arch. Esp. Arq.* xxxvi (1963) 241, fig. 44. D. 32·6, H. 2·3.

7 Klagenfurt, from Virinum; Praschniker and Kenner, *Der Bäderbezirk von Virinum* 100, fig. 102, no. 7110. D. 27·0; fragmentary. Foot developing into an inset. No groove on rim.

*8 Louvre CA 2829, from Sousse. D. 19·8. Two grooves round centre of floor.

9 Athens, Agora P 15360. Fr.; est. D. 35. Form as **8**. Two fine grooves on outer part of floor.

(10 Rome, S. Prisca; Vermaseren and Van Essen (1965) 483, no. 145, pl. CXXVIII. 4. D. 40, H. 3. Fragmentary. Perhaps this form.)

Variants with decoration

*11 Athens, Agora P 15179. D. 29·0. Fragmentary. One groove round centre of floor; lathe-mark at centre, inside and outside. Appliqué decoration on rim: alternating animals and trees (originally six of each?).

12 Constantine (Algeria), from Tiddis; Salomonson (1968) 118, pl. IV. 5; *id.* (1969) 109, figs. 21, 69. Fragmentary; very large size. Scheme similar to **11**; animals and *venator* alternating with shrubs with birds (four of each?).

Variant type

13 Tunis, Bardo, from Sidi Daoud. D. 36·2, H 3·3. Low vertical wall, chamfered on outside, surmounted by broad flat rim, rising obliquely with groove at lip; small groove round edge of floor. Very fine thin ware, with bright slip (thin and streaky on underside).

For further examples, see Salomonson (1968) 118–19.

The development of this form is from a flat-rimmed type, closely related to Form 33, to one with a higher flaring rim (cf. Form 60). Most pieces are in the fine ware characteristic of Form 50, but some early pieces are rather different. The variant **13** seems early, on grounds of fabric.

The earliest example of the form known to me is a fr. from the Athenian Agora (P 27176), from an early–mid third-century cistern deposit. This has a broad flat rim as **1**, but more accentuated, without the groove at the lip; the slip is glossy, like that of Form 42. 1. The two well-preserved plates **1** and **11** come from another deposit, which appears to represent an accumulation which came to an end in A.D. 267. Of these, **1** is likely to be the earlier piece, and **11** (of Type B) somewhat later, close to 267 in date. Fragments of this form have been found at Ampurias in deposits associated with the destruction of the site in the Germanic invasion of 264; the example illustrated by Lamboglia (**2**) belongs to Type A. A further piece from a deposit of similar date is **6**, which forms part of a well-group plausibly associated with the same incursions; the exact shape of this piece is uncertain, but may resemble that of **11**. Type B continues to be found in Agora deposits of the late third and early fourth century; **9** comes from a level which intrudes into one containing coins of Aurelian and Probus (276–82), and is sealed by one with a Constantinian coin—a date around or just after 300 seems appropriate. **12** represents a late variant, closely related in its decorative motifs to the relief-decorated dishes of the latter part of the fourth century (Forms 54–56); it should perhaps be classed with Form 60 below. Its motifs are similar to those on Form 54.1; both pieces may date from the years around or just after 350.

[For earlier dated pieces of Type A, see now *Ostia* i (1969) 58.]

Suggested dates: Type A—*c.* 220–270.
Type B—*c.* 260–320.

FORM 49

Antioch 838, Salomonson C2, Carandini 9C.

Plate, as Form 48, but with low curved wall ending in a sharply incurved rim. Fine ware, as that of Form 50, with fine closely spaced turning-marks on exterior of wall.

Size-range: D. 23–40. Uncommon.

Examples:

*1 Vatican, Museo Sacro 1358. D. *c.* 31·2. Normal matt slip with mere wash under base.

2–5 Yale 1938.4968, etc., from Dura-Europos; Cox (1949) 15, no. 91. Four examples (one drawn). D. 24–36·5.

*6 Corinth CP 1870. Fr.; est. D. 36.

For further examples see Salomonson (1968) 116.

Variants (cf. Antioch 838 p)

7 Tunis, Bardo (ex Houdart Coll.). D. at rim 23·5. More open form, as **8**, without incurve at rim. Ware as **1–6**, but thicker. Small ledge-foot. Two circles at centre of floor.

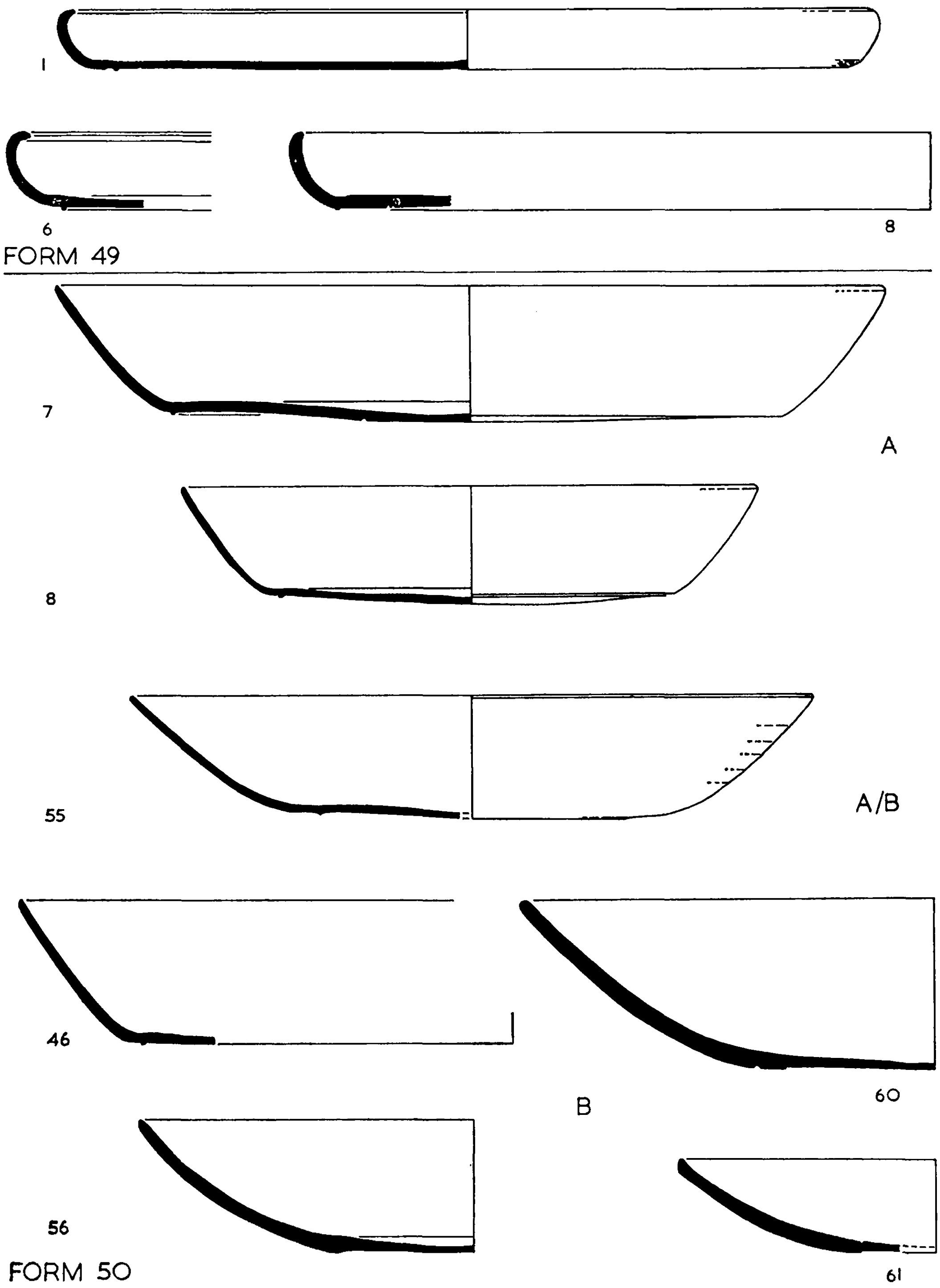


FIG. 12 Scale 2:5

*8 British School at Rome, from Veii area (S. Etruria survey, site 865594). Fr.; est. D. 48. Similar. Two small grooves on underside.

The only well-dated pieces of this form are **2–5**, from Dura-Europos, which cannot be later than the destruction of the site in 256 (for this date see p. 63 n. 3). Their relatively good state of preservation indicates that they, together with their companion pieces Form 50.1–6 (*q.v.*), in all probability formed part of the floor-deposits from the actual destruction. In fabric they are identical with the examples of Form 50 from the Agora deposits of 267. The lack of any certain ancestor in the earlier varieties of the ware indicates that the form began only a few years before 256. It could have lasted, along with Form 50, until around the end of the century; the variants **7–8**, to judge by their fabric, may take us even later, providing a link with the fourth-century dishes of Form 62.

[For earlier dated examples, see now *Ostia* i (1969) 56.]

Suggested dates: c. 230/40–300 (with variants continuing later).

FORM 50

Lamboglia 40, Antioch 836 p–x, Salomonson C1.

Large dish, with broad flat floor and high straight wall rising at an angle to a plain rim, tiny bevelled foot under edge of floor (as on Form 48). Undecorated. Thin-walled; fine fabric with thin smooth slip. A finer version of Form 31. Two types distinguished:

A with steep wall and broad floor; fine fabric.

B with more flaring wall and proportionately smaller base (sometimes lacking the small foot); fabric rather less fine.

Size-range: D. 20–40 (rather less on some specimens of Type B). Very common.

Examples:

Type A

1–6 Yale 1938.4967, etc., from Dura-Europos; Cox (1949) 15, no. 90. Six well-preserved examples (one drawn). D. *c.* 30–33. Form and fabric as **7–8**.

*7 Athens, Agora P 21650. D. 31·3. Fine ware. Foot irregularly turned, in places becoming an inset. One small groove on underside.

*8 Athens, Agora P 21652. D. 21·7. Fine ware, but with some impurities.

9–10 Athens, Agora P 3059, P 2273; Robinson (1959) 60, pls. 12, 64, K1–2. D. 35·5, *c.* 24·5. Slightly finer; ware close to **11–12**. On both, a small groove on underside close to foot.

11–12 Athens, Agora P 18423, P 2513. D. 34·4, *c.* 27·0. Very finely made, with smooth glossy slip, darker in colour than body-clay, on inside and outside down to base, and brushed thinly across underside. On both, a small groove on underside close to foot.

13 Athens, Agora P 9891; Robinson (1959) 97, pl. 64, M 139. D. 28·4. Similar to **7–8**.

Several other near-complete examples similar. D. 21–38.

14 Olympia (Gästehaus I, 1953–54); Walter, *Olympiabericht* vi 60, figs.

47e, 49. D. *c.* 31·7. Ware similar to **11–12**, with slip brushed over underside. Groove on underside close to foot.

15 Olympia (as **14**); ref. Walter, *loc. cit.* D. *c.* 38·0. Ware and slip as **7–8**. Groove on underside, as on **14**.

16 Olympia, Leonidion (1955). D. 34. As **15**.

17 Louvre, CA 2821, from Sidi el-Hani. D. 22·1.

18–19 Copenhagen, ABc 120–121; *CVA Copenhague* 7, pl. 312. 19, 21. D. 27·5, 24·2. **19** tending towards Type B?

20–23 Copenhagen, ABc 743–4, 746–7, from Sidi Daoud; *ibid.* pls. 311. 7–8, 312. 20, 22. D. 24·5–28·9. **22** (=pl. 312.20) tending towards Type B?

24–28 Leiden, from Ksour es-Saf, etc.; Holwerda nos. 695–699. D. *c.* 21–32·5.

29 Musée de Mariemont (Belgium), from Sidi Ferruch (Algeria); Faider-Feytmans, *Musée de Mariemont* (1952) 158, pl. 57, R 88. D. 25·2.

30–31 La Alcudia (Elche); Ramos Folqués, *Arch. Esp. Arq.* xxxvi (1963) 241, figs. 39, 43, 45. D. 32, 21. **30** has groove on underside.

32 Rabat Museum, Malta, from Ta' Ġawhar; ref. *Museum Report, 1960* (Malta, 1962) 7. D. 36; fragmentary.

33 Rabat Roman Villa, Malta. D. 33; fragmentary.

34 Valletta, Malta, Nat. Mus., from Zejtun. D. 28·2. Slightly inferior ware, with dull slip all over.

35 British Museum 59.11–29.10, from Karpathos (?). D. 23·1. Similar.

36 Athens, N.M. 13021, from Rhodes; Technau, *Ath. Mitt.* liv (1929) 50, Beil. XXVI. 2, Abb. 41; Iliffe, *QDAP* vi (1936) 18, fig. 1. D. *c.* 36·0. Sagging base.[1]

37 Cyrene (in stores, from Italian excavations). D. *c.* 38; fragmentary. Fine slightly mottled slip.

38 Damascus 10417, from Khisfine; S. and A. Abdul-Hak, *Catalogue illustré du département des antiquités gréco-romaines au Musée de Damas* (Damascus, 1951) 82, no. 1, pl. XLII A (visible in top centre). D. 31·3.

39 Jerusalem, Palestine Museum 38.342, from Beit Nattif. D. 29. Fragmentary. As **7–8**.

40–41 Köln, RGM 59.29 and 59.80, from S. cemeteries (Kartäuserhof); refs. Doppelfeld, *BJ* 159 (1959) 155, 158. D. *c.* 32·5, *c.* 33·0. Fine fabric. On both, a small groove on underside close to foot (cf. **9–10**).

42–43 Köln, RGM, Niessen coll. 2253–2254; *Sammlung Niessen, Cöln,* ed. 3, 1911, nos. 2253–2254, pl. XCII. D. 25·1, 34·0. **42** as the preceding, with groove close to foot; **43** rather less fine, without bevelling on rim.

(44 Cimiez; Mouchot (1963) 141–2, no. 6. D. 26. Apparently a piece of this form; the illustrated profile is rather abnormal.)

45 Köln, RGM 29.1581, from the S. cemeteries (Jakobstr. grave 107 (1929)); Fremersdorf, 11–12, fig. 2c. D. 37·5. Similar fine fabric, but with more flaring and curved wall. Rim bevelled.

*46 Athens, Agora P 15414. Fr.; est. D. *c.* 37·2. Clay rather granular, with thick lustrous brownish slip. Steep wall (as early series).

[1] The profile illustrated by Technau is inaccurate (as can be seen by comparison with the published photograph), as also is the scale indicated. Iliffe publishes a corrected drawing.

The following are rather less fine than **7–8**, etc., and have a more flaring wall-profile:

47 Tarsus excavations, 38.1432; Jones (1950) 276, figs. 165, 207, no. 812. D. 36. 'Base flat, buckling slightly at center . . . Clay medium red, gritty, sharp, hard; mica. Red wash over surface.'

48 Cyprus Museum D.62.1935, from Kilani; D. 37·2. Clay slightly granular, with dull slip. Flaring wall, flat base.

49 Leiden, from Olbia (formerly in a collection at Odessa); Holwerda, no. 700. D. 25. Similar.

50 Ventimiglia; Lamboglia (1963) 147. Fragmentary; D. *c.* 31·5. Similar form.

51 Valletta, Malta, Nat. Mus., from Hamrun; ref. *Museum Report, 1960* (Malta, 1962) 8: 'Open dish 1 (large, imitation Samian).' D. 22·1. Similar; two fine grooves near edge of base.

52 Tripoli Museum. D. 26·2. Similar; one groove under base.

53 Köln, RGM 30.476, from S. cemeteries (Jakobstr. grave 227 (1930)); Fremersdorf, 12–13, fig. 5b, pl. 2. 1a. D. *c.* 37·5. As **48**.

54 Köln, RGM 26.340, from S. cemeteries (Severinstr. 71/73, grave 3 (1926)); *ibid.* 11, fig. 1a, pl. 2. 1c. D. *c.* 25·5. Similar.

Transitional to Type B

*55 Saloniki, E. cemetery (Theologikí Scholí t. 23); *Arch. Delt.* xxi (1966) pl. 350, b. D. 25·9. Wide-flaring wall; slight foot. Slip on inside and over rim; unslipped exterior surface slightly rough.

Type B

*56 Athens, Agora P 16303. Fr.; est. D. 25·4. Fairly fine fabric with smooth matt slip on inside and over rim (cf. ware of Form 52B).

57 Köln, RGM 30.809, from S. cemeteries (Hohenstaufenring 57, grave 8 (1930); Fremersdorf, 14, fig. 6a, pl. 2.1b. D. 24·7. Similar; one groove on outside above base.

58 Tunis, Bardo, from La Skhira. D. 24·0. Similar.

59 Corinth C–36–774. Fragmentary; D. 20. Similar; base sagging.

*60 Olympia (in excavation stores). Fragmentary; est. D. 31·5. Thicker, coarser fabric (as Forms 59–61), with slip on inside and over rim. Slight foot, marked off by a groove on the outside and a small offset on the inside.

Perhaps this type: Salomonson (1968) 124–5, form D4a.

Late variant

*61 Rome, American Academy, from S. Maria in Aracoeli (Capitoline). Fr.; est. D. *c.* 19·5. Fairly fine ware, with thick rather lustrous slip on inside and over rim (cf. ware of Form 91B). Very shallow curving form, with base of small diameter marked by a small inset. One groove on floor.

For further examples (Type A) see Salomonson (1968) 114–16.

This form is a derivative of Form 31; the earlier examples retain the steep wall-angle and separate small foot which are its characteristics. The more refined and thinner-walled fabric, which it shares with Forms 48–49, is a new development, seen at its best in the earlier pieces. The general line of development is towards a more open bowl-like shape; this is accompanied by a slight deterioration in the quality of the fabric.

The earlier examples of Type A are exceptionally thin-walled for their size, often no more than 2–3 mm. in thickness. The body-clay is pure, hard and clean-breaking, and frequently splintery; the finely smoothed surfaces are coated with a thin slip. This slip is rather glossy on a number of the earliest pieces (e.g. **9–12**), but in most cases is matt, merging almost imperceptibly with the body-clay. On the early pieces just cited it covers the inside and the outside down to the base, and is further brushed very thinly across the underside; elsewhere it ends at some ill-defined point on the outside of the wall, the rest of the outside displaying merely a polished surface. Fine turning-marks are generally visible on the exterior (as on Forms 48–49), in this case around the junction of the wall and the base. Fine parallel brush-marks can often be observed on the interior. Further features of this series are the tiny ledge-like foot and a small bevel on the outside of the rim, causing it to come to a point. Tiny grooves also appear at various points on the undersides of many of these vessels; a small groove a short distance inside the foot seems characteristic of some of the earliest (see **9–12, 14–15**).

Later examples of Type A (**46–55**) show a slight decline in quality. The fabric of these tends to be slightly thicker and slightly more granular in texture, and does not splinter so readily; the slip is rather more thickly applied. The main series (**47–54**) display a more flaring and curved wall-profile, with a rounded rim lacking the bevel of earlier pieces; the base is mostly flat, without the distinctive small foot.

In Type B the wall becomes yet more flaring, and the floor contracts in size; the two tend to be run together, with only a small ridge or offset separating them. The overall shape becomes that of a shallow bowl with curved sides. The base tends to be slightly hollow. Examples are mostly between 20 and 25 cm. in diameter. The ware of these pieces is similar to that of the later examples of Type A, but here the smooth dull slip covers the inside and the rim only. The latest specimens of the form (**61**; cf. Form 80) show a further diminution in size and coarsening of fabric.

This common form is prolific in dated groups of the second half of the third century and the first half of the fourth, and remains fairly common until the end of the fourth century. It may be assumed to have made its appearance slightly before the middle of the third century; the earliest dated examples are those from Dura-Europos (**1–6**), which may be dated to 256 or a little earlier, together with Form 49. 2–5 (see discussion under Form 49). These are of the typical early fabric. The form is said to be common in the final (destruction) levels at Ampurias, sacked in 264; probably of similar date are the two dishes from La Alcudia (**30–31**) (see discussion of Form 48.6, which was found with them). In the Athenian Agora, numerous frs. of the form and several more or less complete examples occur in the deposits connected with the Herulian sack of 267; **9–13** are among them. Form 50 is by far the most common vessel-type of this ware in these deposits. **7–8**, which were found alongside Form 48 nos. 1 and 11 (*q.v.*) may be of similar date, but could

be a little earlier. The three Olympia pieces (**14–16**) also appear to come from Herulian destruction deposits.[1] Only a few years later is the piece from Malta, **32**, from a destruction deposit containing a relatively unworn coin of Claudius II (268–70).[2] Almost all the above are of the fine early fabric. Similar fine pieces continued to be made into the early years of the fourth century. Frs. remain common in late third- and early fourth-century groups in the Athenian Agora, though many of these may be survival-pieces of the Herulian period. Firmer evidence is provided by a series of finds from grave-groups at Köln. No. **40** was found in a grave together with nine late third–early fourth-century coins, the latest of A.D. 312–317;[3] **45**, which marks the transition to the later variety of Type A, occurred in association with an VRBS ROMA issue of the 330s.

The less fine examples of Type A appear to belong mostly to the earlier part of the fourth century; a few frs. from the third century deposits listed above are also of this kind (which represents only a slight difference in quality), though not many. In the Agora this variety is represented by **46**, from an early fourth-century deposit. The Köln piece **53** was found together with local pottery of first half of fourth-century types. The exact limits of this variety are not easy to fix, but it seems to have been superseded by Type B by the late fourth century.

Specimens of Type B occur in deposits of the second half of the fourth century in the Athenian Agora; the best preserved among them, **56**, comes from a context of *c.* 375–400 (with associated coins to Valens), and more good frs. of the same type were found in a well-group containing coins to Theodosius I (379–395).[4] The Köln piece **57**, to judge by the other examples of the ware found in the city, may be of slightly earlier date. Frs. of Form 53B were found with the Corinth piece **59**. The type seems to have virtually died out by around 400, though a few isolated examples (such as **61**) may be later.

[For earlier dated examples of Type A, see now *Ostia* i (1969) 55–56.]

Suggested dates:	Type A	thin fine examples	*c.* 230/240–325.
		later variety	*c.* 300–360.
	Type B		*c.* 350–400 +.

FORM 51

Dish/bowl with flat floor, sloping wall, slightly curved, and flat rim; tiny foot under outer part of floor. Appliqué decoration on the rim. A broader shallower version of Form 52, perhaps its predecessor. Two types:

A with broad flat rim of normal circular shape, bearing appliqués. One example only.

B with narrower rim, widening out at each end to form a grip-handle (with fretted edge as on Form 42, but smaller). Appliqués on handles and rim. Salomonson form C (1969, p. 19). Uncommon.

Both types medium-sided; see examples below.

[1] **14** and **15** form part of a floor-deposit from the destruction period of Gästehaus I; the latest associated coin (in the fill above) is of Alexander Severus (see Walter, p. 60). **16** may plausibly come from a similar deposit.

[2] Or possibly Aurelian (270–75).

[3] Constantine I, Cohen no. 523; **41** is a stray find from the same cemetery.

[4] Agora Deposit I 15:1.

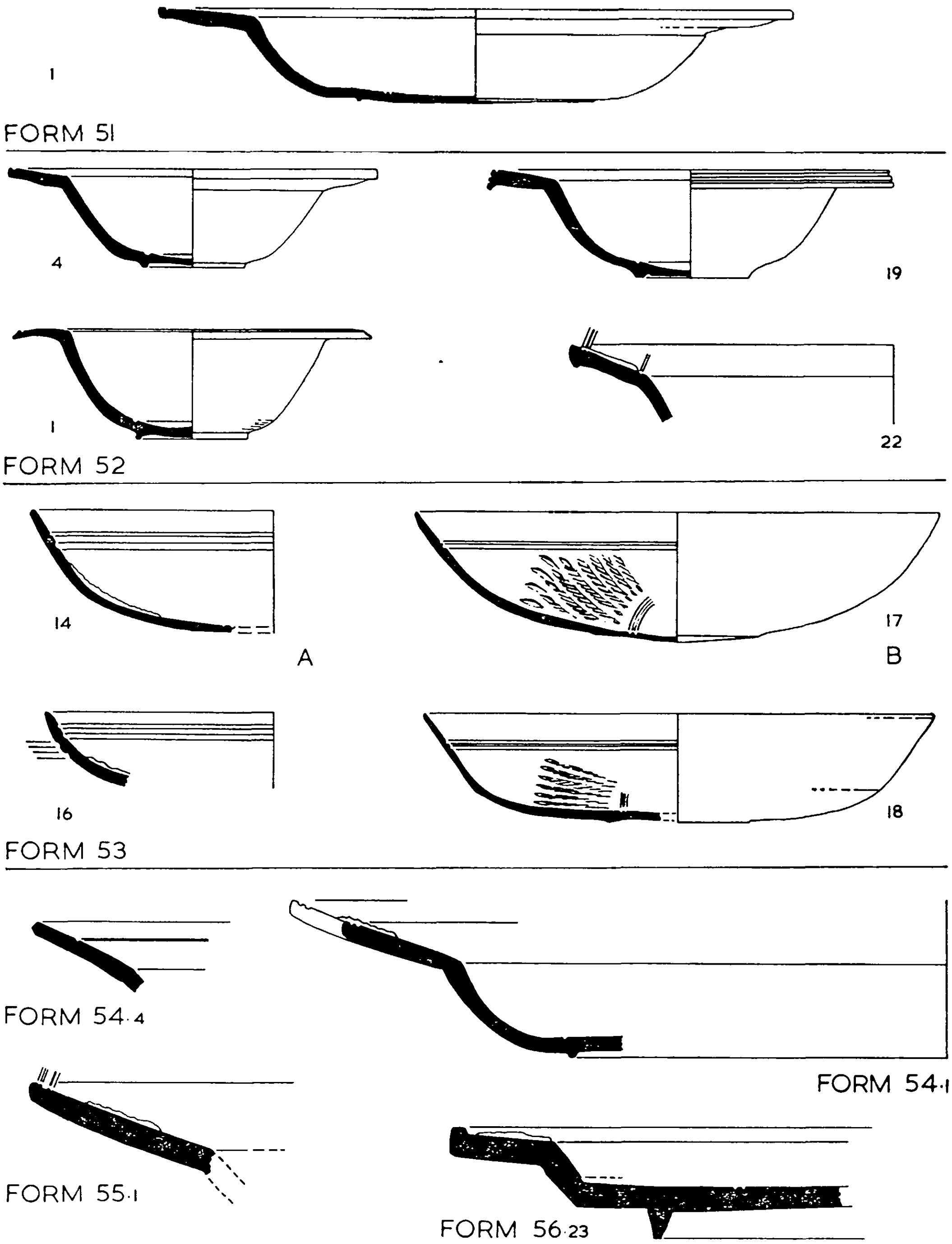


FIG. 13 Scale 2 : 5

Examples:

Type A

*1 Louvre AO 6561, 'trouvé entre Sousse et Kairouan'; *CRAI* 1913, fig. 1 on p. 442; Salomonson (1969) 58, 107, fig. 78. D. 23·7. Ware close to that of earlier examples of Form 50, and finer than that of Form 52; bright orange-red slip, ending on underside of rim; surface of rest of exterior has a slight sheen. Tiny foot, as on Forms 48–50. Two fine grooves on floor, one at lip. Six appliqués: crab and two fish motifs r. (two of each). These motifs are large, and between them cover most of the rim.

Type B

2 Formerly Farges Coll., Constantine, from Thelepte; Besnier and Blanchet, *Collection Farges* 14, no. 15, pl. V, 9. D. 19·2. The published photograph indicates a vessel similar in shape to **1**, but with a rather narrower rim, expanding into grip-handles at each end. One groove on floor, a second round edge of floor (perhaps accompanied by a small offset); groove on rim at lip. Appliqués: on each handle, spreading over rim, an Oceanus-head flanked by two dolphins; on rim on each side, midway between handles, a smaller dolphin (one l., one r.).

3 Berlin 31068, from Kairouan; K.A. Neugebauer, *Führer durch das Antiquarium* ii, *Vasen* (Berlin, 1932) 210; Salomonson (1969) 108, fig. 19. L. over handles 24·8. Description as for **2**; perhaps same vessel.

Fragments:

4 Tunis, Bardo, from el-Aouja; Salomonson (1969) 108, pl. III, 2. Fr.; est. D. 25. Ware as Forms 52–53. Rim as **1**, with two grooves at lip. Part of a handle preserved, bearing appliqué dolphin r. facing the missing centre.

5 El-Djem; L. Foucher, *Thermes romains des environs d'Hadrumète* (Tunis, 1958) 24–25, pl. XIV a; Salomonson (1969) 108, pl. III, 3. Fr.; D. not stated. Rim fairly narrow (as **2**), with groove at lip. Appliqué motifs covering rim and handle: Oceanus-head flanked on l. by a large fish and on r. by a dolphin.

6 Cagliari; *NSc* 1949, 259, no. 97, fig. 33*c*. Fr.; as last, but with smaller handle. Groove at lip. A single appliqué on handle: Oceanus-head (very similar to those on **2**, but apparently from a different mould).

In shape and fabric no. **1** appears to be intermediate between the forms listed above and Form 52. An early fourth-century date for the piece seems plausible. The pieces of Type B are more closely related to Forms 52–53 in their decoration; the large fish on **5** is similar to ones on Form 52B, and the Oceanus-heads seem related to the 'Acheloos' motifs occurring on that form (Form 52, nos. 11, 14). The handles on Type B seem to be debased versions of those seen on Form 42.

Probable dates: Type A—early fourth century.
Type B—fourth century (possibly later than A).

FORM 52

Lamboglia 35 (decorated), Antioch 861, 865, Salomonson C 11.

Small bowl with straight steep wall, broad flat rim and small low foot; the successor of Form 44. Fairly thin-walled. Fine ware, slightly granular (sometimes clean-breaking), with thin matt slip on interior and over rim. Surfaces well-smoothed, except for underside of rim, which retains slight wheel-marks; fine turning-marks often visible at base of wall (as on Form 50, etc.). Rim rises slightly; lip either plain, or slightly hooked, with outside bevelled and bearing groove(s). Foot generally square-cut, *c.* 2–3 mm. high. Groove on rim at lip, a second on floor. Two types:

A undecorated, with plain lip.

B with appliqué decoration on rim, normally comprising three or four small motifs, well-spaced. Rim generally flat on top, lip plain or hooked. Salomonson form b (1969, p. 17).

Size-range: Type A: D. *c.* 13–16.
Type B in two sizes: small—D. *c.* 11–16; large—D. *c.* 18–23.
Late variants—D. *c.* 20–25.

Type A uncommon, Type B fairly common.

Examples:

Type A

*1 Rabat Roman Villa, Malta. D. 13·3. Rim slightly convex, with bevelled lip (cf. **10**).

2 Tunis, Bardo, from el-Aouja. D. 14·8. No rim groove. Slip dark, covering whole of vessel (cf. Form 44).

3 Tunis, Bardo, from el-Aouja. D. 14·8. No floor groove. Rising rim, drooping at lip, as on Form 45C; low triangular foot (cf. Form 45). Slip as on **2**.

Type B (small size)

*4 Louvre AO 6618, from el-Djem; Salomonson (1969) 107, pl. II, 5. D. 13·7. Plain lip. Three appliqués: two lionesses and bear (?).

5 Tunis, Bardo, from el-Aouja; Merlin, *BAC*, 1916, CXXIX, no. 12; *Cat. Alaoui* (1922) 310 no. 1155; Salomonson (1969) 69, 107, fig. 95. D. 12·7. As **4**. Appliqués: two lions or hounds r., and two (?) double-tier capitals.

6 Tunis, Bardo, ex Houdart Coll.; Salomonson (1969) 107, pl. IV, 4. D. 14·9. As **4**. Appliqués: two masks and two oak-sprays (alternating).

7 Cornell Univ., bought at Carthage; Waagé (1948) 49, pl. IX, shape 861. D. *c.* 15·2. As **4**. 'Applied figures of a dog and a leaf alternate on the rim.'

8 Sousse, Maison des Masques; L. Foucher, *La Maison des Masques à Sousse: Fouilles 1962–1963* (Tunis, 1965), 40, no. 10, fig. 55. D. 13·5. As **4**. Appliqués: a vine-leaf and a cluster of grapes preserved (originally four motifs?).

9 Barcelona 7538; Lamboglia (1963) 158. D. *c.* 15·5. As **4**. Appliqués: baskets with grapes (from different moulds).

10 Vienna IV 2001, said to be from Aquileia. D. 15·0. Similar; lip bevelled, foot triangular (cf. **1**). Appliqués: two lions and two lionesses running l., alternating. Slip continuous down to base. PLATE XI *a*.

11 Louvre AO 6639, from el-Aouja; Salomonson (1969) 107, pl. II, 6. D. 13·8. Bevelled lip, slightly hooked. Appliqués: two Acheloos-heads (?) flanked by leaf-sprays, alternating with two fish (one l., one r.).

12 Tunis, Bardo, from el-Aouja; Merlin, *BAC*, 1916, CXXVIII–CXXIX, no. 11; *Cat. Alaoui* (1922) 310, no. 1157. D. 14·0. Bevelled lip, bearing a groove. Slip covers most of outside. Appliqués: four baskets of grapes (cf. **9**).

13 Tunis, Bardo, from el-Aouja; Merlin, *BAC*, 1914, CLI, no. 9; *Cat. Alaoui* (1922) 309 no. 1154; Salomonson (1969) 107, fig. 20 a. D. 15·8. Lip as **12**. Appliqués: two fish (different) and an oak-spray.

14 Madrid, from Baelo; Paris, *Fouilles de Bélo* ii 166, no. 3. D. 14·8. Lip-form uncertain. Appliqués: two large fish alternating with a smaller fish and an Acheloos-head (?) (as on **11**?).

15 Tunis, Bardo, from el-Aouja; Merlin, *BAC*, 1914, CLI, no. 8; *Cat. Alaoui* (1922) 310, no. 1156; Salomonson (1969) 107, pl. IV, 6. D. 15. Lip-form uncertain. Appliqués: two baskets with flowers and fruit (grapes?), and two lions running r.

16–17 Tunis, Bardo (?), from Kairouan area; *BAC*, 1923, XLI–II, d and e. Both D. 14. Lip-forms uncertain. Appliqués: on **16**, two palm-branches and two lions (alternating); on **17**, three palm-branches and a lion.

18 Floridia, Sicily; *NSc*, 1912, 358, fig. 12 top left. D. *c.* 11(?). Lip-form uncertain. Appliqués: four small palm-branches.

*19 Munich N.I. 5588; *Arch. Anz.*, 1916, 64, no. 19 (with fig. in text). D. (max.) 15·2. Hooked lip, bevelled on outside, bearing two grooves; inner side of foot defined by a groove. Slip slightly lustrous. Five appliqués, poorly impressed: four large fish (mullet?) r., and a fish of more slender kind l.

20 Tunis, Bardo, from el-Aouja; Merlin, *BAC*, 1914, CLI, no. 10; *Cat. Alaoui* (1922) 309 no. 1153; Salomonson (1969) 107, fig. 20 b. D. 12·8. Variant: lip as **19**; carination at base of wall; foot thin. Slip rather thick and lustrous. Appliqués: three large and three small fish (different types).

For further examples, see Salomonson (1968) 120, pl. IV.

(large size)

21 Carthage, Lavigerie. D. 19·1. Lip bevelled. Appliqués: dog l., small lioness (?) l., dog l., leaf (?).

*22 Benaki Mus., Athens, 12493, from Alexandria. Fr.; est. D. 24. Variant: thicker fabric with dullish slip; rim rounded, and slightly

hooked; two grooves on rim at lip, and one more at inner edge. Appliqué: a palm-branch preserved.

The evidence for the date of this form is scanty; none of the complete examples listed above come from closely datable contexts. The form is clearly the successor of the third-century bowl-type Form 44. The undecorated variety Type A shares certain features of shape and fabric with the earlier form, and is perhaps to be regarded as merely a transitional type leading on to the appliqué-decorated bowls of Type B. It is probably to be placed around the beginning of the fourth century; no examples come from good contexts. How early the decorated vessels of Type B begin is by no means clear; the only pieces from dated deposits are a few scraps in levels of the second half of the fourth century in the Athenian Agora. On the other hand, **15** is said to have been found in the same grave as an appliqué-decorated juglet of early–mid third-century type (Form 171.15). It is perhaps significant that most of the Agora frs. are of the larger size, whereas most of the complete specimens (**15** included) are of the smaller size, which corresponds more or less o that normal in Type A and in the earlier Form 44. On balance, a date slightly before 300 for the introduction of this type seems probable, as Salomonson has indicated (1968, p. 120). There is little, if any, change in the style of the appliqués themselves throughout, though further investigation may permit us to separate those motifs which are early and those which are late. Such motifs as the double-tier capital (as on **5**) are popular on the third-century jug series, whereas the small palm-branch motifs (as on **16–18**) have more in common with the stamped wares of the later fourth and early fifth centuries, and may be presumed to be later in date. The rim-form may also have some chronological significance: the plain-lipped type, which appears more frequently on bowls of the smaller size (see **4–9** for examples), appears to be on the whole earlier than that with grooves on the exterior. The variety with a hanging lip and two or more grooves (as **19–20**) does not appear among the Agora examples and is clearly late; **20** is not far removed from the mid fifth-century Form 74. Also absent among the Agora pieces cited is the variant type here represented by **22**, whose rim-form and fabric are similar to those of undecorated bowls of the first half of the fifth century (cf. Form 72A). Several frs. of this late type occur in the Benaki Museum collections; one may note that they are all of relatively large dimensions (tending to confirm the suggestion made above). The thicker slip of these two variant types tends to blur the decoration, which is generally less carefully impressed than on normal examples of Type B.

Suggested dates: Type A—*c.* 300–350?
Type B—*c.* 280/300 to late fourth century; late variants early fifth century +.
Small examples mainly early, large examples late.
Plain lips mainly early, grooved lips later.

FORM 53

Antioch 891.

Bowl with curved body, flat base and plain rim, slightly flaring. A somewhat sagging profile is normal, with a faint carination in some cases; the edge of the base

may be marked by a low moulding. Two grooves on inside below rim, two grooves round centre of floor. Ware as Form 52, often thin. Two types:

A with appliqué decoration round inside (three to five motifs). Cf. Forms 39–41. Salomonson form a (1969, p. 17).

B with broad zone of multiple rouletting round inside, overlapping in such a way as to produce an effect of radiating sets of strokes ('feather-rouletting').

Size-range: D. *c.* 17–21.

Type A fairly common, Type B common.

Examples:

Type A

1 Madrid, from Baelo; Paris, *Fouilles de Bélo* ii (Bordeaux and Paris, 1926) 165–6, no. 1, pl. XXX top left; ref. Palol Salellas (1948) 452; Salomonson (1969) 25, 101, fig. 27. D. 19, H. *c.* 4·5. Three grooves on inside of rim, one on floor. Appliqués: young man carrying sack, cantharus, bearded old man with sword, tree with fruit. Salomonson (*loc. cit.*) identifies the figures as Abraham and Isaac; cf. those on **9** below.

2 Madrid, from Baelo; Paris, *op. cit.* 166, no. 2, pl. XXX bottom left; Salomonson (1969) 33, 35, 103, fig. 40. D. 21. Scheme of grooves as **1**. Appliqués: Hercules and Hydra, shrub with fruit, tree, Hercules and Lion, shrub (repeated).

3 Tetuán (Tamuda), Morocco; P. Quintero Atauri, *Excavaciones en Tamuda: Memoria resumen de las practicadas en 1941* (Larache, 1942) 6–7, pl. II; *Mem. Mus. arq. prov.* v (1944) 223, pl. LXXVII, 1; ref. Palol Salellas (1948) 452; Salomonson (1969) 51–2, 105, fig. 72. D. *c.* 17·5, H. *c.* 5·0. Standard scheme. Appliqués: crouching hare (?), basket with fruit, hound with hare (?) between forelegs, crouching hare, tree.

4 Constantine, Algeria, private coll., from Timetlas/Telergma region (?); Berthier and Martin (1948) 125–8, with 1 pl.; Salomonson (1969) 28, 101, fig. 31. D. 18·5, H. 4·5. Standard scheme. Appliqués: Eve, tree with Serpent, Adam; small palm-branch below.

5 Carthage, Lavigerie; Salomonson (1962) 90, pl. XXXII 6; *id.* (1969) 36–7, 103, fig. 43. D. 19·2. No floor grooves (?). Appliqués: below, Leda and Swan; above, two cupids bearing torches flying r. towards a cantharus on a two-tiered capital (?).

6 Tunis, Bardo 2523; Salomonson (1969) 31, 33, 103, fig. 38. D. 17·5. Appliqués: two actors (?); large palm-branch below. Scene perhaps allegorical.

7 Tunis, Bardo, from el-Aouja; Merlin, *BAC*, 1915, CLXXIX–CLXXX, with fig. in text; *Cat. Alaoui* (1922) 310, no. 1158; Salomonson (1962) 90, n. 176; *id.* (1969) 27–8, 101, fig. 18; *Tunisian Exhibition* no. 61, fig. r.[1] D.17·2, H. 4·3. Normal scheme. Appliqués: four sea-monsters (two r., stag foreparts, alternating with one l., and one r. vomiting a Jonah-figure); round centre, two fish l. (different), overlapping the two floor grooves.

[1] American ed., no. 64.

8 Rome, Mus. Naz. delle Terme, from Lanuvium; Visconti, *Bull. comm. arch. municipale* i (1872) 117–22, pl. III; Pagenstecher (1909) 180; Vermaseren, *Corpus Inscriptionum et Monumentorum Religionis Mithriacae* i (The Hague, 1956) 112, no. 207; Salomonson (1969) 30, 103, fig. 37. D. *c.* 21·2. Normal scheme. Appliqués: Mithras r., killing Bull, small lion r., Mithras l., dragging Bull by its hind legs.

9 Rome, S. Prisca; Vermaseren and Van Essen (1965) 369, no. 645, pl. 87. 10; Salomonson (1969) 24, 101, fig. 24. D. 16, H. 5; fragmentary. Only one groove on floor. Appliqués: (1) standing figure with upright sword, (2) man r., with head turned, and sword in r.h., holding the head of a boy l. down on an altar. Apparently part of a cycle representing Abraham's Sacrifice.

10 New York, Met. Mus. 17.194.2039, from Egypt (ex Gréau coll.); *Coll. Julien Gréau* 262, no. 12, pl. 337. 2; Pagenstecher (1912) 172, fig. 25; Salomonson (1969) 31, 103, fig. 39. Fragmentary; est. D. *c.* 17–18, H. 4·2. Only one groove on floor. Appliqués: large ship, bearing on l. (on prow?) a Victory crowning a second figure, on r. seated and standing figures bearing torches (perhaps Ceres and Proserpina). This motif, the only one preserved, covers one whole side of the vessel.

11 Frankfurt market (1968); Salomonson (1969) 46, 105, fig. 55. D. not stated. Appliqués: on l., captive tied to a stake, on r., prowling lion (applied vertically).

12 Cyprus Museum 1945.X–19.1 (formerly in a private collection, and not from Cyprus); *SCE* IV.3, p. 71, fig. 32.1; Dikaios, *Guide to the Cyprus Museum*, ed. 2, p. 61, ed. 3, p. 72, no. 279 e. D. *c.* 17·4, H. *c.* 4·2; fragmentary, restored. Appliqués: boar, lion, wild ass (?).

13 Corfu, Roman Baths (1961). Normal size; fragmentary. Appliqués: erotic scenes.

*14 Athens, Agora P 21686. Fr.; est. D. 18·2, H. 4·6. Appliqués: part of a bear (?) l., and legs of a *venator* r. (?) preserved.

15 Rome, Antiq. Comunale 5077, from Esquiline; *Bull. arch. cristiana* 3 ser. iii (1878) 56–7, pl. II; ref. Pagenstecher (1909) 180; Salomonson (1969) 43–4, 103, fig. 43. Fr.; D. *c.* 21. Three grooves inside rim. Appliqués: bearded figure seated on throne; above, a semicircular arcaded feature (representing a niche?); to r., a small column with double-tier capital.

*16 Sabratha (unstratified, from old excavation dump). Fr.; est. D. 17. Variant: shallow curved form, with two grooves on outside below rim, two grooves close under rim on inside. Appliqué: head of a goat r. preserved.

Further examples of Type A are listed by Salomonson (1969) 101–7.

Type B

*17 Athens, Agora P 7547. D. 19·5. Base sagging.

*18 Athens, Agora P 7551. D. 19·0. Slightly carinated form, with straight flaring wall.

19 Corinth C-66-85. D. 17·6. Similar profile.
20 Tunis, Bardo, from el-Djem. D. 18·2.
21 Leiden, VDB 97, from Tripoli; Holwerda no. 701; Salomonson (196 55, fig. 79. D. 18.

This form is studied in detail by Salomonson in his most recent article (1969, *passim*), in which most of the better-preserved examples and a selection of fragments are illustrated. As Salomonson points out, the relief-decorated examples of Type A are closely related to the series of rectangular dishes of Form 56 (*q.v.*), sharing many decorative motifs with them; some motifs are also shared with Form 52B. The various appliqués are related in subject, generally forming a single composition covering the whole of the interior. There is strong evidence for matching sets of bowls with related scenes forming 'cycles';[1] these may have formed 'services' with similarly decorated dishes of Form 56.[2] As yet, however, no such set of matching vessels has been found together.

In terms of shape, the examples of Type A appear to fall into two sub-types:

(1) the canonical type, with a scheme of grooving as described above (e.g. **3**, **4**, **7**, **8**, **11–14**);
(2) a variant type, tending to a rather shallower and more open form, with the rim-grooves (normally three) set closer to the lip and with either a single floor-groove of wide diameter or none at all (e.g. **1**, **2**, **6**, **15**; **16** is related).

In spite of a superficial resemblance to the earlier Form 39, the latter type would appear to be late, for its decorative motifs are particularly closely related to those on Form 56 and in some cases find parallels on the African lamps of my Type II (see below, pp. 312–13).[3] Animal and *venatio* scenes, arranged in a band round the inside, are common on the canonical type, together with a number of figured scenes (e.g. the Mithras cycle on **8**); on sub-type (2) allegorical and Judaeo-Christian themes, arranged in a single field with scant regard for the grooves on the floor, are the general rule.

Direct dating-evidence for Type A is slight, but indicates a date-range mainly in the second half of the fourth century, which is in keeping with the stylistic evidence (links with Form 56, Mithras scenes, etc.). The Athenian Agora again provides most of the evidence:[4] **14** was found in association with a coin of Constans (333–350), a number of further fragments, generally of the canonical type, were found in late fourth-century deposits, and a couple of rim frs. of this form (type uncertain) occurred in a group of the third quarter of the century. In none of these groups was Type A common, and all of the examples are fragmentary. The vessel from

[1] See Salomonson (1969) 27 (Abraham and Isaac), 27–8 (Jonah), 35–6 (Hercules), 46–7 (*datio ad bestias*) and *passim*.

[2] Similar matching sets are common in hoards of Late Antique silverware, of which these vessels are patently cheap copies.

[3] For flying cupids as on **5**, see Salomonson (1969) fig. 112; for an enthroned figure as on **15**, see *ibid.* fig. 49.

[4] This has already been summarized by Salomonson (1969, p. 55). I should like to point out that the groups 'A 9' and 'A 12' mentioned there refer only to a provisional list of deposits used in my thesis; for full details of findspots see my Athenian Agora report (forthcoming).

Corfu (**13**) appears to form a group with Form 58.12, Form 59.4, 13, and pieces of Form 50B and Form 67 (not listed here); the fill from which it comes may date from *c.* 375. The pieces of this type from S. Prisca in Rome come from what are probably early fifth-century fills. In general, the pieces just noted are of the canonical type; on this basis the variants of sub-type (2) are probably to be assigned an early fifth-century date, like the later pieces of Form 56.

Type B is one of the commoner forms present in the deposits of the end of the fourth century in the Athenian Agora; the two pieces **17** and **18** come from one of these. Type B is not attested in any of the earlier deposits, and is also rather uncommon in the deposits of the mid fifth century; it should, then, be confined to the decades around A.D. 400. No other site has provided any significant dating-evidence for the type.

Suggested dates: Type A—*c.* 350–430+.
Type B—*c.* 370–430.

FORM 54

Lamboglia 42/48, Salomonson form d (1969, p. 19).

Dish with scalloped rim. As Form 42, but with broad rim cut or moulded into a polygonal form, with slightly concave sides (about eight). Fine ware, similar to Forms 52–53. Appliqués on broadest parts of rim, where the sides meet.
Rare; no complete examples. The following frs. may be cited:

*1 Ostia, 4675–8; Squarciapino (1951) 136–7, nos. 7–10, fig. 3 left and centre; Lamboglia (1963) 158–9; Salomonson (1969) 108, pl. IV, 1–2. D. at inner edge of rim est. 36, of foot est. 28, max. width of rim 6·7. Four frs., probably from a single vessel. Two grooves at lip, following the scalloping; groove at edge of floor, over foot. Small angular foot. Ware as that of Form 56; walls of medium thickness. Appliqués (one in each angle of rim): Inv. 4675: large boar r. Inv. 4676: part of an identical boar. Inv. 4677: shrub or tree, with bird perched on top. Inv. 4678: similar shrub with bird (slightly different). PLATE XI*b*.

2 Louvre (uncat.); Salomonson (1969) 108, fig. 23. D. at inner edge of rim est. 28, max. width of rim 6·2, length of side est. *c.* 14. As **1** but rather shallower; similar ware. Two grooves at lip; foot missing. Appliqués: tree at angle; to l., panther attacking ostrich; to r., panther.

(3 Aquileia; G. Brusin, *Gli scavi di Aquileia (1929–1932)* (Udine, 1934) 128, no. 2, with fig. in text. Apparently a piece of a vessel of this type. On rim, part of a tree (at angle), and a goat r. (at centre of side). Profile not indicated.)

Variants

*4 Benaki Mus., Athens, 12500, from Alexandria (?); Salomonson (1969) 108. Max. D. est. *c.* 25. Apparently part of a bowl, probably octagonal; parts of two sides preserved. Fine-grained ware, as Forms 52–53 and 56. One groove on middle of rim. At angle between sides, an applied

Oceanus-head (similar to that on Form 51. 2). Width of rim 4·9 (max.), 4·0 (min.).

5 Benaki Mus., Athens, 12487, from Alexandria (?); *ibid.* 108, pl. IV, 5. D. uncertain (rather large?); max. W. of rim 5·0. Fr. of octagonal (?) dish. No grooves on rim. Small applied fish l. in angle.

Further examples cited by Salomonson (1969) 108.

The form has close connections with Forms 52–53. Salomonson (1969, 55–56) cites an example from Sétif (Algeria), found in a well-dated level of just after the middle of the fourth century.

Probable date: mid–late fourth century.

FORM 55

Large dish. As Form 54, but circular. Applied decoration on the rim. Rare; the following frs. may be cited:

*1 Ostia 4680; Squarciapino (1951) 138–9, no. 12, fig. 3 right. Fr. of rim; est. D. *c.* 50. Thick-walled. Slip rather thick and lustrous. Triple groove at lip. Appliqué: Athena (or similar figure) l., standing.

2 Sabratha Museum, under no. 284; Salomonson (1969) 45, 108, fig. 53. Fr. of rim; very large D. Ware as Form 56. One groove at lip. Appliqué: sailing ship, with heads of four figures visible in it.[1]

3 Hippo Regius; Marec, *Libyca* vii (1959) 151, figs. 3–4; Salomonson (1969) 24–5, 28, 108, figs. 22, 32. Two rim frs.; est. D. 55+, W. of rim 8. Two grooves at lip. On one fr., part of Abraham's Sacrifice (tree, ram r., Abraham with sword, holding Isaac down on an altar); on the other, lower part of a man r., and two lions facing him (interpreted by Marec as Daniel in the lions' den).

Further pieces: Salomonson (1969) 108.

No direct dating-evidence, but apparently a contemporary of Form 56. The fabric of **1**, together with the scheme of grooves at its rim, suggests a late date, comparable with that of the late variants of Form 52B. The fr. **2** should be earlier; its motif recurs on Form 53A. **3** shares identical motifs with Form 56 (*q.v.*).

Probable dates: **1**—first half of fifth century. **2**—second half of fourth century. **3**—perhaps intermediate.

FORM 56

Rectangular dish with relief decoration. Flat rectangular floor, low straight walls rising at steep angle, broad flat horizontal rim, of same width on all four sides, with raised moulding at lip (sometimes bearing a groove); angular tapering foot about 1 cm. high under outer part of floor. Mould-made; profile equally angular on inside and outside. Relief decoration on rim, either applied or impressed from a mould; large rectangular panel with relief decoration on floor (mould-impressed), generally surrounded by grooves, but sometimes covering the whole area. Minor details often added freehand. The floor decoration generally takes the form of a

[1] Perhaps from a Jonah-cycle (see under Form 56 below).

figured composition; the design may incorporate an inscription. Good-quality ware of finely granular texture, with few impurities; smooth surfaces, covered with a thin matt slip; walls of medium thickness. An unusually high proportion of pieces of this form exhibit rivet-holes, indicating repairs made in antiquity.
For size see examples listed below.
Not uncommon.

This form is discussed at length by Salomonson in his article of 1962 (see Bibliography), in which the decorative motifs are fully described. I list here merely the more complete examples of each type, together with a number of supplementary pieces; for the rest the reader is referred to the article cited. For the sake of convenience, I follow the same order as Salomonson (the floor decoration takes precedence).

Examples:

a *Venatio scenes* (Salomonson (1962) pp. 58–64)

1 Cairo (Egyptian Mus.) 86116; Salomonson (1962) 58–62, pl. XIII, 1. L. 37, W. 31. Rivet-hole at broken corner. Two-part scene (resembling a diptych): in left panel, a *venator* emerging from a large shield; in right panel, a panther(?); arena wall in background on both. Inscription across top: IVLIVS FESTVS MISSIONE(m) FERIOR(um) DAT. Rim: lion-hunt.
Same: Benaki Mus., Athens 12410, from Alexandria (*id.* (1969) 84, 99, fig. 121).

2 Berlin 31324, from Athribis; Salomonson (1962) 59, pl. XIV, 1–2; *id.* (1969) fig. 1. L. 25, W. 20. As **1**, but left-hand side only; no inscription. Rim: four large fish at corners (l. and r.), four baskets on sides.

3 Carthage, Lavigerie, 47.34; Salomonson (1962) 62, pl. XVI, 1. Floor fr. *Venator*, ostrich and other wild beasts.

4 Heidelberg, Arch. Inst. 27.48, from Egypt; *ibid.* 63, pl. XVI, 6. Floor fr.; W. of panel *c.* 12·8. Various wild beasts (top of panel lost).
Same: Benaki Mus., Athens, 12419, from Alexandria.

b *Four-horse chariot with charioteer* (Salomonson (1962) 64)

5 Berlin 4885; Salomonson (1962) 64, pl. XVII, **1**; *id.* (1964) 124, fig. 33. L. est. 25, W. 20. Lead clamp on rim. Rim: elaborate floral scrollwork.

6 Hildesheim, Pelizaeus-Museum 2200; *id.* (1962) 64, pl. XVIII, 1. Size similar to **5**; identical decoration.

c *Dignitaries* (Salomonson (1962) 65–67)

7 Carthage, Lavigerie 47.31; *id.* (1962) 65–66, pl. XIX, 3; *id.* (1964) 123, fig. 31; *id.* (1969) fig. 7. H. of panel, incl. border motif, *c.* 23·2. Part of floor. Consul with sceptre, in frame bearing scrollwork as on **5**–**6**. Probably part of a large dish of this form. Similar (?): Benaki

Mus., Athens, 12373, from Alexandria. Corner of a similar border-pattern preserved on floor, surrounded by frame of normal type; medallions (cf. **13**) on rim.

8 Cairo 8978; Strzygowski, *Koptische Kunst* (Cat. gén. Musée du Caire; Vienna, 1904) 227–8, fig. 280; Salomonson (1962) 66–67, pl. XX, 1. Floor fr. Magistrate in front of an *aedicula*; beginning of an inscription preserved above, part of a large freehand cross-monogram[1] on left; frame visible on r.

9 Benaki Mus., Athens, 12437, from Alexandria(?). Floor fr. Figures under an arcade: on left, a standing woman holding an olive-branch; at centre, a seated man; rest missing. Poor technique; all details rendered with dots.

Other motifs: see Salomonson (1962) 66, pl. XX, 3–4.

d *Dioscuri* (Salomonson (1962) 67–72)

10 Benaki Mus., Athens, 12393a, from Alexandria(?); Kantorowicz, *Proc. Amer. Philos. Soc.* cv (1961) 390–3, fig. 46; Salomonson (1962) 67 ff., pl. XXI, 1. L. of floor *c.* 30·3, W. of panel 18·9. Castor and Pollux with horses, flanking a cantharus; above, the freehand inscription ORATIONIBVS SANTORVM PE/RDVCET DOMINVS. Rim: lions, aedicula with statue, cantharus.

Same: Benaki 12394a (Kantorowicz, *loc. cit.*, fig. 47; Salomonson pl. XXI, 2), with part of a panther preserved on the rim of the shorter side. Also Benaki 12430: fr. with the r.h. figure preserved.

11 Mouzaïaville, Algeria (lost); *Revue Africaine* vi (1862) 463–4; *CIL* viii no. 9285; P. Monceaux, *Mém. Acad. Inscr. et Belles-Lettres* xii.i (1908) 308, no. 321; Diehl, *Inscr. lat. christ. veteres* ii (Berlin, 1925) 487, no. 2499; Kantorowicz, *op. cit.* 392; Salomonson (1962) 69, 72. L. 45, W. 37. Floor as **10**. Rim: twelve saints or apostles.

e *Pegasus and Nymphs* (Salomonson, 73–74)

12 Cairo 46742, from Edfu; Allais (1959) 47, fig. 4; Salomonson (1962) 73, pl. XXIII, 1; *id.* (1969) 62, fig. 87; ref. Wace (1948) 54, n. 2. L. est. *c.* 36·7, W. 30·5. Rivet-hole from repair. Main scene occupies whole of floor; no subsidiary motifs. Rim: lion-hunt (related to that on **1**).

13 Djemila (1948 excavations); Allais (1959) 43–46, fig. 1; Salomonson (1962) 83; *id.* (1964) 117, fig. 23. L. 48, W. 40·5. Canthari sprouting ivy-branches above main scene. Rim: medallions.

14 Carnuntum (Austria), from excavations in the civil settlement, 1906; Zingerle (1907) 330–344, pl. VIII; M. von Groller, *Der römische Limes in Österreich* ix (1908) 71–74, figs. 31–32; Salomonson (1962) 69, 74, 86, pl. XXI, 4; J. W. Kubitschek and S. Frankfurter, *Führer durch Carnuntum* ed. 6, Vienna 1923, 110, fig. 71; ref. *Enc. dell'arte antica* ii 646. L.

[1] Related to Stamp Type 298 (see p. 275 below).

uncertain, W. 35·0, H. *c.* 4·6. Fragmentary. Floor-decoration as **13** (very little preserved). Rim: KIPKH panel and standing female figures preserved.

15 Sousse Mus., from Maisons des Masques; L. Foucher, *La Maison des Masques à Sousse: Fouilles 1962–1963* (Tunis, 1965) 40–42, figs. 54 bottom (profile) and 56. L. 43·5, W. 34·9, H. 4·6. About half extant. Two KIPKH panels above main scene. Rim: dolphins at corners, sea-monsters (fish-tailed stags and rams) on short sides; long sides missing.

16 Djemila; E. Babelon, 'Note sur un fragment de poterie à figures', *BAC* 1920, 231–4; Allais (1959) 49, fig. 5; Salomonson (1962) 85–86, pl. XXXI, 1; *id.* (1964) 120–1, fig. 27; ref. *Enc. dell'arte antica* ii 646 (under 'Circe'). Fr.; floor decoration as **15**. On rim above, two cupids in boat, fishing (perhaps part of same scheme as on **15**).
Same: Allais (1960) 127–9, figs. 4–5 (3 floor frs., from Hippo Regius and Tiddis); Benaki Mus., Athens, 12479 (floor fr.).

Same motif: Benaki Mus. 12412, 12415, 12417, 12426 (floor frs.; 12417 has piece of rim preserved with part of an animal (cf. **12**)).

f *Priam's visit to Achilles* (Salomonson (1962) 74–82; *id.* (1964) 107–116)

17 Tunis, Bardo, from el-Djem (amphitheatre); Merlin, *BAC* 1913, 324–6, pl. XXVIII (also noted p. CC, e); F. Drexel, *JdI* xxx (1915) 197, fig. 2; *Cat. Alaoui* (1922) 306, no. 1131, pl. XX, 3; K. Bulas, *Les illustrations antiques de l'Iliade* (Lwów, 1929) 97, fig. 49; Salomonson (1962) 74–76, pl. XXIV, 1; *id.* (1964) 107–10, fig. 1; *Tunisian Exhibition* no. 62, fig. s (American ed., no. 65). L. est. 33, W. est. 28·5. Rather thick soapy slip. Main scene surrounded by a simple frame. Rim (mostly missing) : dogs chasing hares and wild goats, crudely rendered.

18 Berlin 4886, from Egypt; Salomonson (1962) 74–82, pl. XXIV, 2; *id.* (1964) 111, fig. 10; *id.* (1969) fig. 9. Fragmentary. L. uncertain, est. W. *c.* 35·5. Lower left-hand part of main scene preserved (with figure of Priam); around this, an outer band bearing medallions (cf. **13**). On rim, cycle depicting the life of Achilles, in narrative style (only part preserved).
Same: Benaki Mus., Athens, 12374 (floor fr.).

19 Damascus 11812, from Homs; S. and A. Abdul-Hak, *Cat. illustré du département des antiquités gréco-romaines au Musée de Damas* (Damascus, 1951) 85–86, no. 31. About half of floor preserved (dimensions 25 × 22). As **18**; more or less complementary to it.
Right side of main scene preserved (with figures of Achilles and Briseis); medallions in outer zone.

20 Benaki Mus., Athens, 12378b, from Alexandria(?); Salomonson (1962) 75 ff. pl. XXVII, 1; K. Weitzmann, *Ancient Book Illumination* (Martin Classical Lectures xvi; Cambridge (Mass.), 1959) 56–57, pl. XXIX, fig. 64. W. of floor 17·2. Main scene surrounded by simple frame

(part of Briseis preserved). Rim: Achilles cycle; a shortened version of the scenes on **18**, transferred to the other end of the vessel.[1]

Same motifs: Benaki Mus., Athens, 12416 (floor fr.), 12377–12387 (rim frs., Achilles cycle). Four of the rim frs. appear to fill the missing parts of Salomonson's reconstruction (fig. 6), as follows:

Benaki 12385: figure floating r.,[2] bearing a helmet; row of five robed figures.

Benaki 12387: the last two of the five robed figures, bringing garlands(?) to a sixth on r., who holds up an orb(?).

The third and fourth fragments (Benaki 12378a and 12380) do not overlap with the above, but are in similar style. They could form the final part of the cycle. Motifs: figure with double pipes r., maenad(?) r., figure with pan-pipes l.; finally, an architectural motif (at corner of rim), as those on other examples of the series.

g *Personifications of Provinces* (Salomonson, 89)

21 Alexandria 9167a; Pagenstecher, *Bull. soc. arch. d'Alexandrie* xi (1908) 268; *id.*, *Expedition E. von Sieglin* ii, 3 (1913) 114, fig. 125.1–2; Salomonson (1962) 89, pl. XXXII, 1.; *id.* (1964) 126–7, fig. 35; *id.* (1969) 7, fig. 2. Fragmentary. Panel with heads of a young man and a woman, with a date-palm between them; and inscriptions above: (Maurit)ANIA and AFRICA. Rim: a *venator* (in corner) and a bear (top centre) preserved. Same: Benaki Mus, Athens, 12399 β. On floor, bottom of panel; rim motifs below a duplicate of those on **21** (similar motifs on frs. α and γ).

h *Nereid on hippocamp*

22 Alexandria, Univ. Coll.; Wace (1948) 54, pl. III; Salomonson (1962) 74. Size not stated; fairly small. Rivet-holes. Variant: no decoration on rim. Main scene in squarish panel.

i *Saints flanking cross-monogram*

*23 Benaki Mus., Athens, 12405/12431; Salomonson (1969) 57, 99, fig. 77. Floor at least 26·8×20·0; fragmentary. Part of cross-monogram with small open *rho*; seated saint (or the like) on r.; rest lost. Frame: two small grooves only. Rim: part of a Jonah-cycle. Some retouches.

Similar: Benaki 12425. Floor fr.; bottom of a cross-monogram (?); seated figure with book l., edge of second figure on r. Frame as **23**. Perhaps part of same composition as on **23**.

24 Benaki Mus., Athens, 12424. Part of floor. Elaborately jewelled cross-monogram, with closed *rho* and A and ω below arms; flanked by seated (?) saints, the one on l. with a book. The figure on r. appears to be the same as that on **23**, but lacks its retouches.

Same: Benaki 12433. Floor fr.; upper part of saint on left.

A few frs. in the Benaki Museum do not correspond to any of the above types. [The Benaki Museum pieces are listed briefly by Salomonson (1969) 99, 101.]

[1] The central figure (Salomonson p. 78, b) (Thetis) and the small tree to the r. of her are omitted.

[2] Partly visible in Salomonson's drawing. The same figure also occurs on a fr. from the Athenian Agora (P 11972).

Cross-links between the various types are provided by their rim decoration. In some cases (notably the Achilles dishes **18–20**) rim and floor decoration form part of a single unified composition, but generally there is no close relationship between them: the same rim-motifs may occur in association with different floor-schemes, or even be transferred to the floor (as in the case of the medallions; see below). The chief rim designs are as follows:

(i) *Medallions* (three motifs, alternating; also used as borders to floor decoration). See Wace (1948) pls. I–II; Salomonson (1962) 81–85, fig. 6, pls. XXIX–XXX; *id.* (1964) 116–120. Two different sizes (D. *c.* 2·4 and D. *c.* 2·8–3·0); see Allais (1960) 126.
Examples: see under nos. **7, 13, 18–19** above (motifs **c, e, f**). Also: Allais (1960) 126–7, figs. 2–3, from Hippo Regius and Tiddis; M. R. Alföldi, *Intercisa* ii (*Dunapentele*) (Budapest, 1957) 257, pl. LXII, 4, in Munich (from the Balkans); Mainz, RGZM O 9091, from Egypt; Athens, Benaki Mus. 12363–75.

(ii) *Lion-hunt* (with hunters at the four corners, sometimes also at centres of sides). Salomonson (1962) 58. At least two versions, with different-sized figures. The best-preserved are those on nos. **1** and **12** (Salomonson (1962), pls. XIII, 1 and XXIII, 1). Very common.
Further examples: Allais (1960) 125, fig. 1, from Hippo Regius; Constantine Mus., from Timgad = *Musée de Constantine* (1892) 111 pl. XII, 7; British Museum 1906.1–29.2 and 3 (same vessel?), from Coptos = Walters (1908) 41, L 157 and 158 respectively; Cairo 32394 = Edgar, *Greek Vases* (Cat. gén. Musée du Caire, 1911) 89, pl. XXVIII; British Museum 74.7–10.299, from Ephesus (this type?); Cambridge, Fitzwilliam Mus. E. 2938–1943 and E. 2940–1943, from Egypt; Mainz, RGZM O 17864, from Egypt; Thasos Mus. 187 π. Numerous frs. in Benaki Mus., Athens, including two with variant schemes (12388, 12402). (Some of these (with lions) may belong to scheme **v** below.)

(iii) *Bear-hunt* (scheme apparently as **ii**). See **21** above; no complete examples. Further pieces: Benaki Mus., Athens, 12398–12401, and one fr. in the Cairo Museum (on display).

(iv) *Dogs and hares, etc.* See **17** above. Benaki Mus. 12402–4 seem to belong to similar schemes.

(v) *Lions, panthers, canthari and aediculae.* See Salomonson (1962) 68 fig. 4 for reconstruction of layout. Occurs on some examples of type **d** (see **10** above). Possibly a connection with scheme **x** below (*q.v.*).

(vi) *Fish* (various schemes). See **2** above (fish and baskets). Others frs. with similar fish: Mond and Myers, *Temples of Armant* (1940) pl. LXXXIII, RMAP 1; Cambridge, Fitzwilliam Mus. E. 2939–1943. Fish and sea-monsters also appear alongside the Jonah cycle (see below).

(vii) *Cupids fishing, dolphins and sea-monsters.* Salomonson (1962) 85. See **15–16**.

(viii) *Achilles cycle.* Salomonson (1962) 76–81, fig. 6 (reconstructed drawing); *id.* (1964) 111–116, fig. 15. For examples and reconstruction of missing parts, see under motif **f** above.

(ix) *Odysseus and Circe* (three-part panel, incorporating the Greek inscription ΚΙΡΚΗ; also found as part of floor decoration). Salomonson (1962) 86–87, pl. XXXI; *id.* (1964) 120–122. Associated with motif **e** above; see nos. **14–16**. The Carnuntum piece, **14**, shows parts of the associated rim-motifs.
Further examples: Benaki Mus., 12479–80.

(x) *Abraham's Sacrifice.* See Salomonson (1962) 67, pl. XX, 6 (Berlin 6104, from Egypt); also Benaki Mus. 12420 (with Hand of God to r. of corner). For a better-preserved version of the left-hand part of the scene, see Form 55. 3. The scene to the right is continued on a sherd in the Southern Baptist collection,[1] in which a foot and hand of the figure of Isaac are visible, followed by a thick-tailed ram to r., with the head turned, and then an *aedicula* of the same type as in scheme **v**, here for the first time fully preserved. It contains a small nude figure in a frontal pose, probably Venus; the upper part of its two-stepped base bears a small running-scroll motif, the lower has two panels with a diagonal cross pattern and subsidiary ornament.[2] The occurrence of this motif could indicate that the Abraham cycle is merely another part of scheme **v**, though Salomonson's reconstruction of the latter as a symmetrical composition seems on the present evidence to be more likely.

(xi) *Jonah cycle.* The best preserved sequence is on **23** above. It runs as follows: on left side, a man and net of fish (?); corner missing; on long bottom side, Jonah swimming r., a sea-horse, and a monster swallowing Jonah; corner missing; on right side a large fish. Other frs. supply the motifs at the corners: at l. end (Benaki 12408 and 12409), a sailing ship with the heads of three men visible in it, and Jonah plunging into the sea on the r.; at the r. end (Benaki 12407), a fishing boat with fisherman and net (followed by the fish noted above). Three frs. from other places may help to complete the cycle. A fr. from Carthage[3] shows Jonah emerging from the monster, with an angel on the r.; two more, from Rome (?)[4] and Tell Fakhariyah in Syria,[5] show Jonah at rest under the carob-tree.

(xii) *Twelve saints or apostles* (composed of same three figures repeated on all four sides of dish). See Salomonson (1962) 72, pl. XXII 1–3. The complete scheme was present on the lost piece **11**. Further examples: Torrox, Spain,[6] Benaki Mus. 12413, 12423.

(xiii) *Floral scroll.* See **5–7** above (motifs **b**, **c**). Similar scroll, 'peopled' with cupids, on the fr. Leiden F 1955/4.24, from Oxyrhyncus.

Further motifs which cannot at present be fitted into any known scheme include

[1] Southern Baptist Theological Seminary, Louisville, Kentucky, no. JE 61–175 (kindly brought to my attention by Prof. H. Comfort).

[2] The ends of these motifs are just visible on Benaki Mus. 12393a; see Salomonson pl. XXI, 1.

[3] A. Héron de Villefosse, *Bull. soc. nat. Antiquaires de France*, 1916, pp. 275–6; Salomonson (1962) 67, pl. XX, 5. Cf. Benaki 12414(?).

[4] R. Garrucci, *Storia della arte cristiana* vi (Prato, 1880) pl. 465.3; formerly in Mus. Kircheriano, Rome.

[5] Kantor (1958) 34–35, pls. 32, 42, no. 60.

[6] Amador de los Rios, *Revista de Archivos* . . . xxxi (1914) 241, pl. xiv; Reyna, *Informes y Memorias* xii (1946) 90, pl. xlii top right.

a cupid flying r. bearing a torch (Benaki Mus. 12478; cf. Form 52.5), a satyr-head (corner motif; Cairo Mus. (on display)), and a palm tree together with a galloping horse with rider (Cairo Mus., bearing no. 27 3 +51 23).

Among the above schemes of decoration earlier and later versions can sometimes be distinguished. It seems reasonable to assume that those vessels which bear a more or less unified scheme of decoration are the earliest in their series: thus in the Achilles series (**f**) nos. **18–20** (with the rim scheme **viii**, which goes together with the floor decoration) should be earlier than **17**. Among these, **18–19** are probably earlier than **20**, where the rim decoration has been shortened (perhaps due to the wearing-out of part of the original matrix). The tendency in this series is towards a smaller-sized vessel. A similar process of cutting down may be seen in nos. **1–2**. Another guide is provided by the occurrence of motifs in two different sizes. As in the case of terracottas,[1] one may here detect two 'generations' of moulds in use, the second being a cast of the positive produced by the first (with consequent loss of size due to firing). This is most apparent in the 'medallion' series **i**, where the roundels vary from *c.* 2·4 to 3·0 cm. in diameter. The examples found on the floors of dishes such as **18** are among the largest in the series, confirming the early date for these pieces indicated above. Those on the rim of **13** (D. 2·6) are probably later. A similar process may be seen in the lion-hunt series **ii.**[2] Retouching of the design of the matrix is another sign of lateness; this is illustrated by a number of pieces where moulded relief is largely replaced by small incised strokes and rows of dots (e.g. some of the Pegasus scenes **e** and also some Achilles scenes).[3] With these one may connect some particularly crudely rendered motifs (e.g. the rim decoration on **17**) and the presence of a thicker slip than usual.

Salomonson has reviewed all the external evidence, which is mainly stylistic, for the dating of this form, and has arrived at a date-range of *c.* 375–430.[4] This appears to be more or less correct, though the limits are perhaps a little too narrow. On internal evidence most of the pieces are clearly closely interrelated, though it is impossible to say just how long any given motif remained in use. The key piece is the Carnuntum dish, **14**, which cannot be later than *c.* 400, when that site was abandoned. The closely related vessel **13** must be of similar date; it was found in a house which appears to have been occupied in the late fourth century,[5] supporting the Carnuntum evidence. The pieces **18–19**, which are in all probability earlier (see above), should thus go well back into the fourth century. Such a date accords well with the introduction of the 'medallion' scheme, which, as Wace and Salomonson have pointed out,[6] has good stylistic parallels in coins and Pannonian bronzework of the years around and just after the middle of the fourth century. Similar parallels may be cited for the Odysseus and Circe motif **ix.**[7]

The occurrence of a number of the same decorative motifs, such as the Dioscuri of **10–11**, on both this form and Form 53A indicates a considerable overlap in

[1] See R. V. Nicholls, 'Type, Group and Series: A Reconsideration of some Coroplastic Fundamentals', *BSA* xlvii (1952) 217–226, pls. 44–45.

[2] On some of the Benaki Mus. pieces of this series the lions are *c.* 8–8½ cm. long, on others the same motifs measure little more than 6 cm.

[3] Compare Salomonson (1962) pl. XXV with pl. XXVI, 1b.

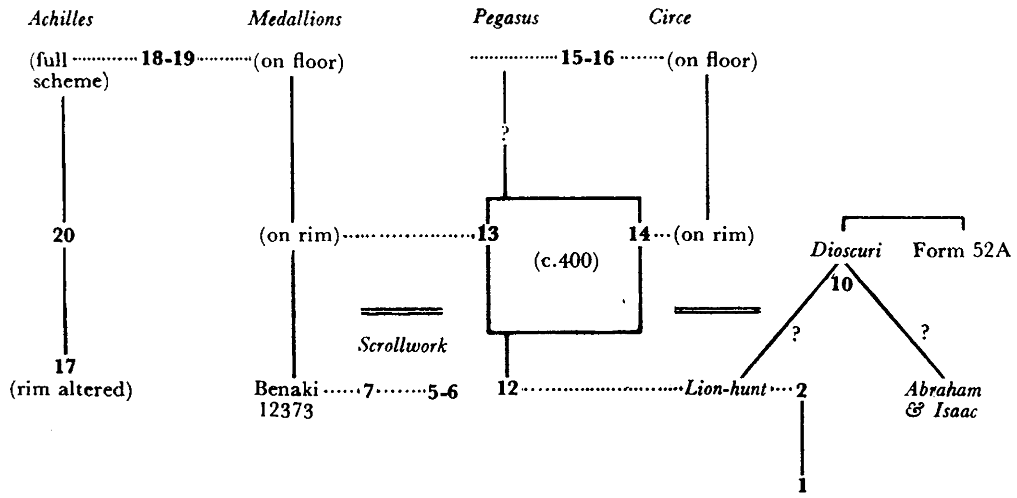
[4] Salomonson (1962) 87–88.

[5] For the context, see Allais (1959) 57–58.

[6] Wace (1948) 51–52; Salomonson (1962) 83–85.

[7] Salomonson (1962) 86–87.

production; other motifs are similar to ones on Form 52B (see discussion below, p. 214). They are presumably mainly early. Later in the series are the various scenes with dignitaries and other draped figures (see **c**, **i**), which have been shown by Salomonson, who compares them with ivory diptychs, to belong to the early fifth century; the same applies to the *venatio* scenes **a**.[1] On the basis of this evidence I propose overall date-range of *c.* 360–430. It is quite possible that production was not continuous throughout this period, for certain of the examples (e.g. **1**) seem to have been created to commemorate special occasions. The probable development of the form may be summarized as follows:



For other vessels in the same series, see Forms 89A and 180.

Suggested date: c. 360–430.

FORM 57

Antioch 820 k (?).

Dish with flat base, curved flaring wall and flat, slightly drooping rim. Fine-grained fabric (as Forms 52–53), with thin smooth slip over inside and upper part of outside. Base of relatively small diameter, either with a slight moulding at edge or meeting wall at a slight angle; on inside, edge of floor rises above base of wall. One/two grooves on rim, one/two grooves on floor. Cf. Form 58.

Size-range: D. *c.* 20–25 (occasionally larger or smaller). Common.

Examples:

- *1 Lepcis Magna, Serapeum C 5. Fr.; est. D. 21·8. One groove on rim, two on floor.
- *2 Rabat Museum, Malta, from Siggiewi (1954); ref. *Museum Report 1954–55*, p. 11.[2] D. 20·7. Two grooves on rim, one (faint) on floor.
- 3 Malta (Nat. Mus., Valletta), from Qrendi (1913). D. 23·7. Two grooves on rim, two on floor.

[1] *Ibid.* 59–60, 65–67.

[2] Two plates: '(a) max. d. 10 in. Damaged.' (=Form 58.21) '(b) max. d. 8½ in. Damaged.' (this piece)

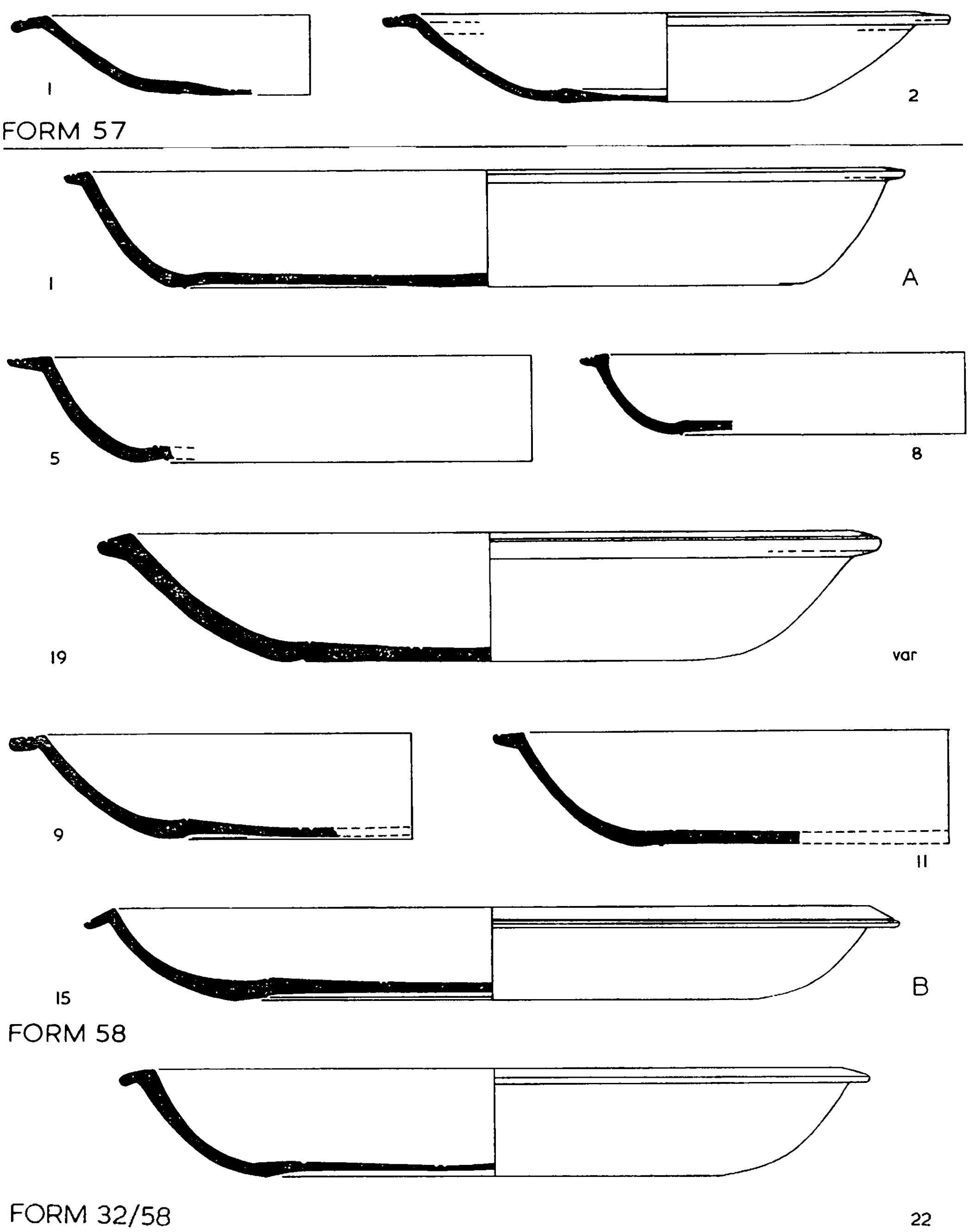


FIG. 14 Scale 2:5

4 Carthage, Lavigerie. D. 23·8. Two grooves on rim, two on floor.
5 Tunis, Bardo (ex Houdart Coll. no. 24). D. 23·0. One groove on rim, two on floor. Floor and wall meet at an angle.
6 Malta (as **3**). D. 21·5. Rather poor quality; shape virtually as Form 58B. Two grooves on floor.

Fragments of this form, which may be regarded as a finer variant of Form 58, occur in considerable numbers in the late fourth-century fills in the Athenian Agora. **2** was found together with a coarse variant of Form 58 (no. 21); this may indicate a rather earlier date. Nos. **3** and **6** were found together with a glass beaker of early to mid fourth-century type and an early 'Tripolitanian' lamp (see p. 314).
Suggested date: c. 325–400 (?).

FORM 58

Lamboglia 52A, Antioch 820–823, Salomonson D2.

Flat-based dish, generally large, with curved wall and short flat rim. Lower part of wall generally provides the resting-surface; the broad slightly hollowed base is marked off by a small inset (sometimes a tiny foot (cf. Forms 48–50)). On inside, a corresponding offset, generally combined with a small groove, at edge of floor. Normally grooves on rim and floor. In many cases a sagging floor, creating an unstable bottom. Two main types, distinguished by their fabric:

A with fabric as late examples of Form 45. Clay of fairly fine quality, generally hard-fired to a brownish or maroon-red colour, with slightly lustrous slip of similar colour covering the whole of the vessel. 'Twig-marks' visible on underside in some cases. The vessels of this type tend to be rather well made, with sharp-cut tapering rims, steep walls, and tiny feet (not necessarily functional).

B with coarser fabric, as that of the forms which follow. Clay fairly granular, generally fired orange-red to red, with semi-lustrous or matt slip of similar colour covering inside and upper part of outside only, the rest of the exterior being merely smoothed. Generally shallower than Type A, with more sloping walls, downturned rims and inset bases. Groove(s) on rim, two grooves on floor.

Also many variants (mostly early?).

Size-range: D. 22–42 (mostly between 27 and 36). Fairly common (both types).

Examples:

Type A

*1 Tunis, Bardo, from el-Aouja (1913). D. 30·6. Slip all over, with 'twig-marks' on underside. Two fine grooves on rim, another on floor.
2 Tunis, Bardo, from el-Aouja. D. 30·0. As **1**. Two grooves on rim, one circle (D. 3·1) on floor.
3 Tunis, Bardo, from el-Aouja. D. 27·8. As **1**. One groove on rim.
4 Carthage, Lavigerie. D. 27·6. As **1**, but underside unmarked. Two fine grooves on rim, two on outer part of floor.
*5 Sparta (1925 excavations). Fr.; est. D. 38. Similar ware. Wide rim with two grooves.

6 Tarragona, uncat.; Lamboglia (1963) 196. D. *c.* 30·3. The drawn profile suggests a vessel of this type. One groove on rim.

7 Sétif (E. of Basilica B); Février (1965) 123, fig. 26, F 1–2, couche 3b no. 21. Fragmentary; est. D. *c.* 27. Probably this type.

*8 Sabratha, unstratified (from old excavation dump). Fr.; est. D. 28. Rather shallow; finely made. Two grooves on rim.

Type B

*9 Athens, Agora P 19221. D. *c.* 29·1. Fragmentary. Two grooves on rim, two preserved on floor.

10 Thera, Greece (in Museum). D. 30·3. Two grooves on rim, two on floor.

*11 Athens, Agora P 5470. Est. D. 33; fragmentary. Slight foot. One groove on rim; floor decoration uncertain.

12 Corfu, from Roman Baths (1961). Fragmentary; est. D. 42. As **11**.

13 Leiden HNN 163, from Ksour es-Saf; Holwerda no. 636. D. 28·0. Slip covers whole of vessel. One groove on rim, two on floor.

14 Copenhagen ABc 772; *CVA Copenhague* 7, pl. 310. 9. D. 25·9. Two fine grooves on rim, two grooves on floor. Rather worn; possibly Type A.

*15 Leiden H III Z 7; Holwerda no. 643. D. 29·8, H. 3·4. Very shallow and open, with downturned rim. Slip covers whole of vessel. One groove on rim, two on floor.

16 Toronto 910.87.382, from Beit Jibrin area, Palestine. D. 25·8. Similar, with partial slip.

Variants

17 Leiden HNN 108, from Ksour es-Saf; Holwerda, in series 637–642. D. 26·2. Thin brittle ware, light orange to light red-brown, with thin red-brown slip on inside and upper half of exterior wall, with splashes below. Variant of Type B fabric; same impurities. Plain flat base; thin triangular rim bearing three fine grooves. One groove round edge of floor (no offset), one round centre.

18 Leiden H III Z 6; Holwerda no. 635, fig. 15, pl. V. D. *c.* 28·2. Ware as **17**. Variant form: thickened flat-topped rim, with three fine grooves on top; flat base, with groove on underside close to edge. Two sets of two grooves on floor, small ridge round edge of floor.

*19 London Museum, Layton Coll. P 97. D. 28·5. Thick-walled; surface worn. Deep form; flat base with low moulding, flaring wall. One groove on rim, two on floor.

20 Tunis, Bardo, from La Skhira (A 10). D. 32·6. As **19**. Brownish slip all over; some 'twig-marks' under base (cf. Type A).

21 Rabat Mus., Malta, from Siggiewi (1954); ref. *Museum Report, 1954–55*, p. 11. D. 25·3. Shape as **19–20**, but with wall meeting base at angle (as on **22–28**). Thick gritty ware, as some examples of Form 32, with rather poor slip all over (dull on outside). One groove on rim, two on floor.

For further examples, see Salomonson (1968) 124.

FORM 32/58

*22–26 Leiden HNN 107, 165, 169, 170, HIIIZ 5, from Ksour es-Saf, etc.; Holwerda nos. 637–642 (with **17** above), fig. 15, pl. V. D. 26·9–27·9. As Form 32, but with flat base; wall flaring, floor meets wall at angle. One groove near edge of floor, two round centre; none on rim. HNN 170 has variant scheme: interior as Form 58 (with floor offset); scratch-like grooves. Fabric as Form 58B, but with poorer finish; slip on inside and upper part of outside only.

27–28 Copenhagen ABc 770–771; *CVA Copenhague* 7, pl. 310.8–9. D. 27·8, 27·1. As **22–26**. Two grooves on floor, none on rim.

The two types which comprise this form appear to be derivatives of the latest form in the early R.S. Ware series (Form 32). Type A is related to Form 45 in fabric, whereas Type B introduces a new fabric, that typical of the series of fourth- to fifth-century dishes with stamped decoration (see Form 59 ff.), characterized by the absence of slip over most of the exterior surface. The form may be regarded as transitional in nature to the stamped wares of the latter part of the fourth century; it never bears such decoration itself. The earliest examples date from the years around 300; frs. of Type B are present in both levels of the early fourth-century deposit in the Athenian Agora which produced Form 46.2 (*q.v.*);[1] **9** comes from here. The type is present in other Constantinian deposits in the Agora,[2] together with late pieces of Forms 45, 50A, etc., and the earliest examples of Form 59 ff. The context of **11** indicates a rather later date, as does that of the similar Corfu piece **12** (see under Form 53.13), which can probably be dated *c.* 375. On the other hand, the form is not well represented in the late fourth-century groups in the Athenian Agora, so it may be assumed to have died out before the end of the century. The evidence for the date of Type A is more scanty: **5** appears to have been associated with late third- and early fourth-century material; **7** was found together with two coins of 348–361.[3]

The above dating-evidence may indicate that the steep-walled and short-rimmed examples of the form (Type A, **1–4**, Type B, **11–12**) are among the latest in the series, of the mid fourth century or later.

To the above two types one may add a large number of variants. Most of these seem to be early, and to mark the transition from Form 32.

The two pieces **17–18**, with their fine fabric, could be among the predecessors of Type B; they are not easy to place.

Another small group (**19–20**), in coarse fabric, has links with both Type A and Type B. It would appear to be early, as the flaring wall-angle indicates; **20** is stated to have been found together with a coin of Gordian III (238–244). **21**, which was found together with Form 57.2 (*q.v.*), may be a later version of this type.

In addition to these there are a number of vessels (**22–28**) which stand midway between Forms 32 and 58. These, like Form 31.15–16, may be very late products of the workshops which produced the 'Severan' shapes Forms 29–33. The slip is no longer applied to the whole of the surface of these pieces, and they have no separate feet. Otherwise the profile and decoration conform to those of Form 32, with the

[1] Deposit F 17:1.
[2] E.g. Deposit K 20:1, with associated coins to Galerius Maximianus (293–311).
[3] Constantius II, FEL. TEMP. REPARATIO issues.

exception of a groove near the edge of the floor, which may be seen as the forerunner of the scheme of offset and groove which becomes standard on Form 58 (one piece actually has this arrangement). The date of this variant form may be assumed to be late third–early fourth century.

Suggested dates: Types A and B: *c.* 290/300–375.
Form 32/58: late third to early fourth century (other variants similar?).

FORM 59

Lamboglia 51, Antioch 817–8.

Flat-based dish, as Form 58 but rather shallower, with broad flat rim. Generally large. Ware as Form 58B, but often rather thicker and coarser; slip, either thick and semi-lustrous or thin and matt, on inside and upper part of outside; surface may bear fine smoothing-marks. The rim, more or less horizontal, is stepped up in two fasciae, the outer (which is broader) bearing either a groove or a slight upward roll at the lip. Stamped decoration, surrounded by grooves, is normal on the floor except on some of the smaller examples. Two types:

A with vertical gouging on exterior of wall, impressed with a blunt implement while the clay was still damp. This creates slight ridges on the interior. (Antioch 818.)

B with plain wall. (Antioch 817.)

Size-range: D. 21–42. Very common.

Examples:

Type A

*1 Newcastle upon Tyne, from Germa (Libya), Royal Tomb 5.[1] D. 39·0. Fasciae of rim moulded, not flat. One groove on underside close to offset. Stamped decoration in two zones, each enclosed by two grooves; six palms (Type 1)[2] radiating from centre, with six smaller palms of similar type, sideways, between them; outer zone of 28 small rosettes (Type 44A). PLATE XII*a*.

2 Köln, RGM, N 2252 (probably from the city); *Sammlung Niessen, Cöln,* ed. 3 (1911), no. 2252, pls. XCII, XCIV; Fremersdorf (1958) 16, pl. 3.3–4; P. La Baume, *Römisches Kunstgewerbe* (Braunschweig, 1964) 139, fig. 123. D. 27·6. Rim moulded (as **1**). Decoration: inner zone of six radiating palms (Type 1), outer zone of 19 small rosettes (Type 44A); two grooves round each, and a groove at centre (obliterated by the stamps).

3 Bonn, Rheinisches Landesmuseum 25.889, from Köln (Aachenerstr., in S. cemeteries); *BJ* cxxiv (1917) Beilage 58, fig. 39; Fremersdorf 16, fig. 7, pl. 3.5. D. *c.* 33·4. Rim normal. Decoration: rosette (Type 44A) at centre, within a groove; inner zone of 5 radiating palms

[1] Caputo's 'necropoli monumentali' (*Mon. ant.* xli (1951) 292–320); the numbering is his. The tomb was excavated in winter 1962–3 by Mr C. M. Daniels.

[2] For list of stamp-types, see pp. 229–81 below.

(Type 3), with rosettes (same type) between; outer zone of 11 similar rosettes. Triple groove[1] round inner zone, two grooves round outer.

4 Corfu, Roman Baths (1961). Est. D. 40; fragmentary. Groove at lip. Slip slightly mottled. Decoration: inner zone of about seven radiating palms (Type 1 or 3), with rosettes (Type 44B) between; outer zone of similar rosettes; triple groove round each.

5 Inkerman area, Crimea; *Arch. Pamatki* xiii (Kiev, 1963) 24, fig. 13.1 and 1a. D. 21. Stamped decoration: inner zone of radiating palms (Type 3), outer zone of grilles (Type 67); grooves round each (scheme uncertain). Apparently a vessel of this type, but the published dimensions are abnormally small for a piece with stamped decoration.

No stamps

6 Fonte do Milho, Portugal; Russell Cortez (1951) 33, fig. 21. D. *c.* 27·1. One groove on floor visible on published profile; no mention of stamps.

Variants

7 Ventimiglia; Lamboglia (1950) 180, fig. 104, no. 6; Lamboglia (1963) 195–6. Fr.; est. D. *c.* 56 (?). Shallow variant with flat base, meeting wall at an angle (cf. Form 32/58); broad downturned rim, plain. Gouged decoration: vertical strokes alternating with small triangular impressions.

(8 Morocco (site uncertain); Jodin and Ponsich, fig. 6a. The published drawing shows a small foot and gouged decoration consisting of a row of wedge-shaped strokes alternating with small triangular impressions (cf. Form 64.1). It is not clear to what extent this drawing is restored; there is no description of the piece in the text.)

Type B

*9 London Museum, Layton Coll. (no number). D. 39·1. Rim normal, with upward roll at lip. Decoration: inner zone of five palms (Type 3), with five rosettes (Type 44A) between, radiating from two grooves round centre; outer zone of 14 rosettes (same type); triple groove round each (with extra groove round the outer one).

10 Copenhagen ABc 742, from Makluba/Ksour es-Saf; *CVA Copenhague* 7, pl. 310. 6. D. 29·8. Decoration: inner zone of six radiating palms (type uncertain), with circles (Type 26) and crescent-shaped motifs (Type 73?) between; narrow outer zone of about 35 small rosettes (Type 44A); triple groove round each.

11 Apollonia (Cyrenaica), from French excavations. D. *c.* 33·7. Decoration: inner zone missing, outer zone of about 20 rosettes (Type 44B); triple groove round each.

12 Leiden H III Z 10; Holwerda no. 646, fig. 14, pls. VI, X. D. 28·0. Rim normal, with groove at lip; one slight groove on underside close to offset. Decoration: six short palms (Type 3), with six rosettes (Type 53) between, closely packed round a small groove at centre, and enclosed by a triple groove.

[1] For an explanation of this term (also 'quadruple/ quintuple groove'), see p. 281.

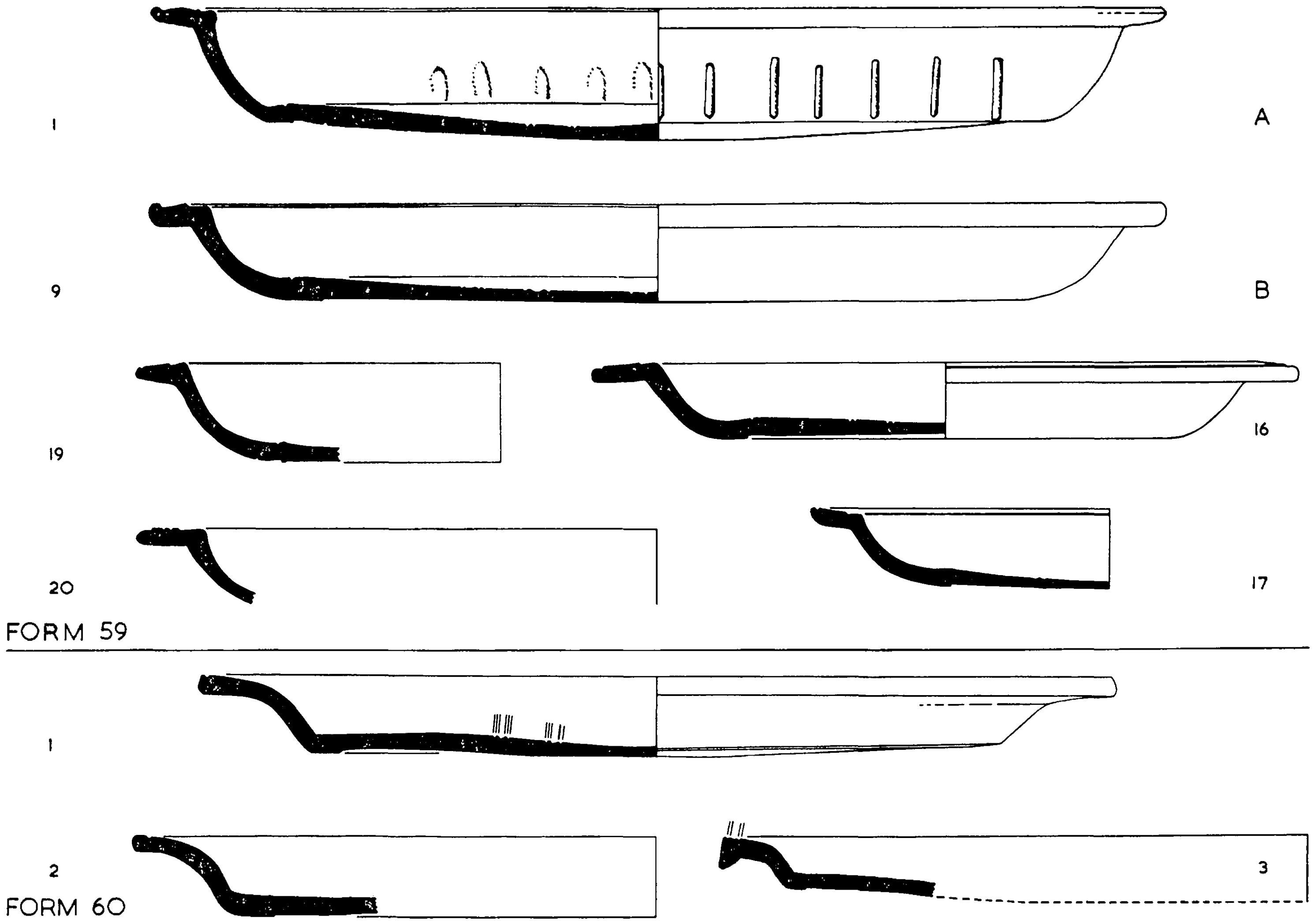


FIG. 15 Scale 2:5

13 Corfu, Roman Baths (1961). Est. D. 41; fragmentary. Third flat fascia at lip. Quadruple groove on floor, surrounding the missing central part (probably stamped).

14 Ehnasya (Egypt); Petrie, *Ehnasya* (1905) 30, pl. XXX, 1. D. *c.* 39. Decoration: inner zone of eight palms radiating from a circle (?) at centre, with circles between; outer zone of palms (?); grooves round each.[1]

15 Predjama (Jugoslavia); J. Korošec, *Arheološke Ostaline v Predjami* (Ljubljana, 1956) 42, 61, pl. XV, 5. Size not given. Decoration: five radiating palms (Type 4), with fringed circles (Type 35); surrounded by triple groove. (Possibly Type A.)

No stamps

*16 London Museum, Layton Coll. P 99. D. 27·2. Two groups of two grooves on floor.

*17 Athens, Agora P 3207. Est. D. 23·0; fragmentary. Two grooves on floor.

18 Leiden H OO 1, from Sfax; Holwerda no. 644, fig. 14, pl. V. D. 25·4. Triple groove on floor.

Fragments (floor missing)

*19 Athens, Agora P 27059. Fr.; est. D. 28·0. Tiny foot; fine groove at base of wall.

*20 Athens, Agora P 27135; Waagé (1933) 296, pl. IX, no. 155. Est. D. 40. Variant: flat rim with raised central band bearing two grooves.

This is one of the earliest forms to bear stamped decoration; it seems to have done so from the start. It forms part of the large group of vessels with floral and geometric decoration of Style A (see pp. 218–19). The earliest pieces tend to be thinner and more carefully made than the rest, with fairly delicate and neatly arranged stamps (Style A (i)); later ones (with decoration of Style A (ii)) are often quite coarse. On Type A the long neat gouging of such pieces as **1** tends to degenerate on later pieces.

The earliest dated specimens are a number of rim frs. of Type B from two early fourth-century deposits in the Athenian Agora; they include no. **19**. The earliest pieces of Type A (**1–3**) can hardly be much later, on stylistic grounds, though external dating evidence for them is slight.[2] A date of *c.* 325–350 for these seems reasonable on the basis of their decoration. The unstamped piece **6** may date from the middle years of the century; the upper levels of the site from which it came are said to have produced fourth-century coins, in particular issues of Crispus and Constantius II. The Corfu piece **4** is probably rather later (see under Form 58.12). The Inkerman dish **5** cannot be precisely dated; it comes from a cemetery which produced a number of early fourth-century coins. More useful for the dating of this type and of Type B is the sherd evidence from the Athenian Agora. Here both types are represented in mid and late fourth-century groups, but in those of the end of the century Type A is considerably less common than Type B, perhaps

[1] Petrie's drawing is too small and simplified for the individual stamp types to be recognizable.

[2] An early–mid fourth-century date for the two Köln pieces would not be out of place, considering the dated examples of Form 50 from there.

indicating that it had already ceased to be made. **17** comes from a deposit of *c.* 360–70. Form 59 as a whole seems not to have lasted much beyond 400, for stamped decoration of Style A (iii) is not found on it. The variant **20** is probably late.

Suggested dates: Type A: *c.* 320–380/400.
Type B: *c.* 320–420.

FORM 60

Antioch 808.

Large flat-based plate. Flat floor, with inset base as on Forms 58–59; flaring rim of quarter-circular form rises from edge of floor. Ware as Form 59. Groove at lip, stamped decoration (Style A) and grooves on floor.
Size: D. 30–41. Uncommon.

Examples:

*1 Iraklion Mus., Crete, uncat. D. (top of rim) 35·0. Decoration: inner zone of six palms (Type 3) radiating from a stamped quadruple circle (Type 27) at centre, with six double circles (Type 24) between their tips; outer zone of twelve quadruple circles (as above); triple groove round each.

*2 Lepcis Magna, Serapeum C 7. Fr.; est. D. 40. As **1**; decoration missing.

Apparently a derivative of Form 48, and one of the earlier forms with stamped decoration. The decoration of no. **1** suggests a date in the third quarter of the fourth century or slightly later. A fragmentary vessel from the Athenian Agora (P 11103) is rather earlier, perhaps dating from around 350; this is in a thinner fabric, and has a slightly hooked rim. Another Agora piece (P 7555), with a more steeply rising rim bearing a flat raised band on the lip, may be later.

Suggested dates: c. 320(?)–380.

From Lepcis Magna comes a variant of this form with an angular hooked lip, in the same ware as Form 68:

*3 Lepcis Magna, Serapeum C 28. Fr.; est. D. 45. Triple groove at lip; floor decoration missing.

Date: mid–late fourth century (?). Unique.

FORM 61

Lamboglia 54 (also 53); Antioch 830–831.

Flat-based dish, as Forms 58–59, but with vertical or slightly incurved rim, flattened on outside to give a more or less triangular profile. Generally large. Ware as Forms 58–59. Stamped decoration (Style A) and grooves on floor, except on some small examples, which have grooves alone. Two main types:

A with incurved or vertical rim, with external chamfer meeting wall at a sharp angle. Generally shallow, with broad floor.

B with vertical rim, tending to overhang on the outside (sometimes hooked), and often marked off by a slight groove on the inside. Tendency to a deeper,

more bowl-like form, with a contraction in the width of the floor, and a longer, more flaring wall. Those pieces with a tall rim with a vertical outer face form a fairly distinct sub-type.

Size-range: D. (rim) 22–41. Very common.

Examples:

*1 Newcastle upon Tyne, from Germa (Libya), Royal Tomb 5. D. (max.) 40·9. Rim sharply incurved, and bevelled on the outside (which is nearly horizontal). Rather thin-walled, with good slip (cf. Form 58B). Decoration: inner zone with large star-motif, composed of 8 lightly stamped 'petals', each enclosing a double circle, and each with a double circle at its tip; between each petal a line of three small single circles (Types 20, 22, 23); outer zone of about 24 small single circles (as above). Triple groove round each zone. PLATE XII*a*.

2 Tunis, Bardo, from La Skhira (B 9). D. (max.) *c.* 35·1. As **1**. Decoration: at centre, star-shaped pattern composed of six 'trefoil' motifs of Type 81, with seven small rosettes (Type 44A) between their tips; outer zone of 10 similar rosettes; two grooves round each.

3 Valencia, uncat.; Lamboglia (1963) 198–9. D. *c.* 36·0. Shallow, with rim slightly incurved, and bevelled on top; groove on wall just outside base inset. Decoration (if any) not cited.

*4 London Museum, Layton Coll. P 96. D. (max.) *c.* 29·4. Rim less incurved than on **1**, bevelled at about 45°; fabric less thin. Small decorated zone at centre, with four palms (Type 1) radiating from a partly obliterated rosette (Type 44A) at centre, surrounded by four grooves with concave bands between them. PLATE XII*b*.

5 Athens, Agora P 11149. D. 35·6 (max.)/33·8 (top of rim). Similar, with sagging base. Decoration: inner zone of five quintuple circles (Type 28), in quincunx arrangement; outer zone of seven similar circles, widely spaced; two grooves round inner zone, triple groove round outer.

6 Olympia (Gästehäuser, 1953–54); Walter, *Olympiabericht* vi 67–70, figs. 61, 63. D. 34. Shallow, as **3**, with sharply bevelled rim as **4–5**; two grooves at base of wall, on resting-surface. Decoration: seven radiating palms (Type 4), with crescents (Type 73) between, surrounded by a triple groove.

*7 Iraklion Mus. (uncat.). D. 33·0/31·2. As **4–5**, with only slight incurve at rim. Thin slip, covering almost all the vessel. Decoration: seven palms (Type 1), radiating from a circle and disk at centre, with triple circles at their tips and quintuple circles between (Types 26, 28), surrounded by a quintuple groove.

8–10 Algiers, from Draria el-Achour; Camps (1955) 235, fig. 5. 1–3. D. (max.) 34·5, 28·9, 29·4. Similar (**10** rather shallow). Decoration: single zones of palms and grilles/circles (types uncertain), surrounded by grooves.

11 Algiers, from Draria el-Achour; *ibid.* 235, fig. 5.5. D. (max.) 40·8.

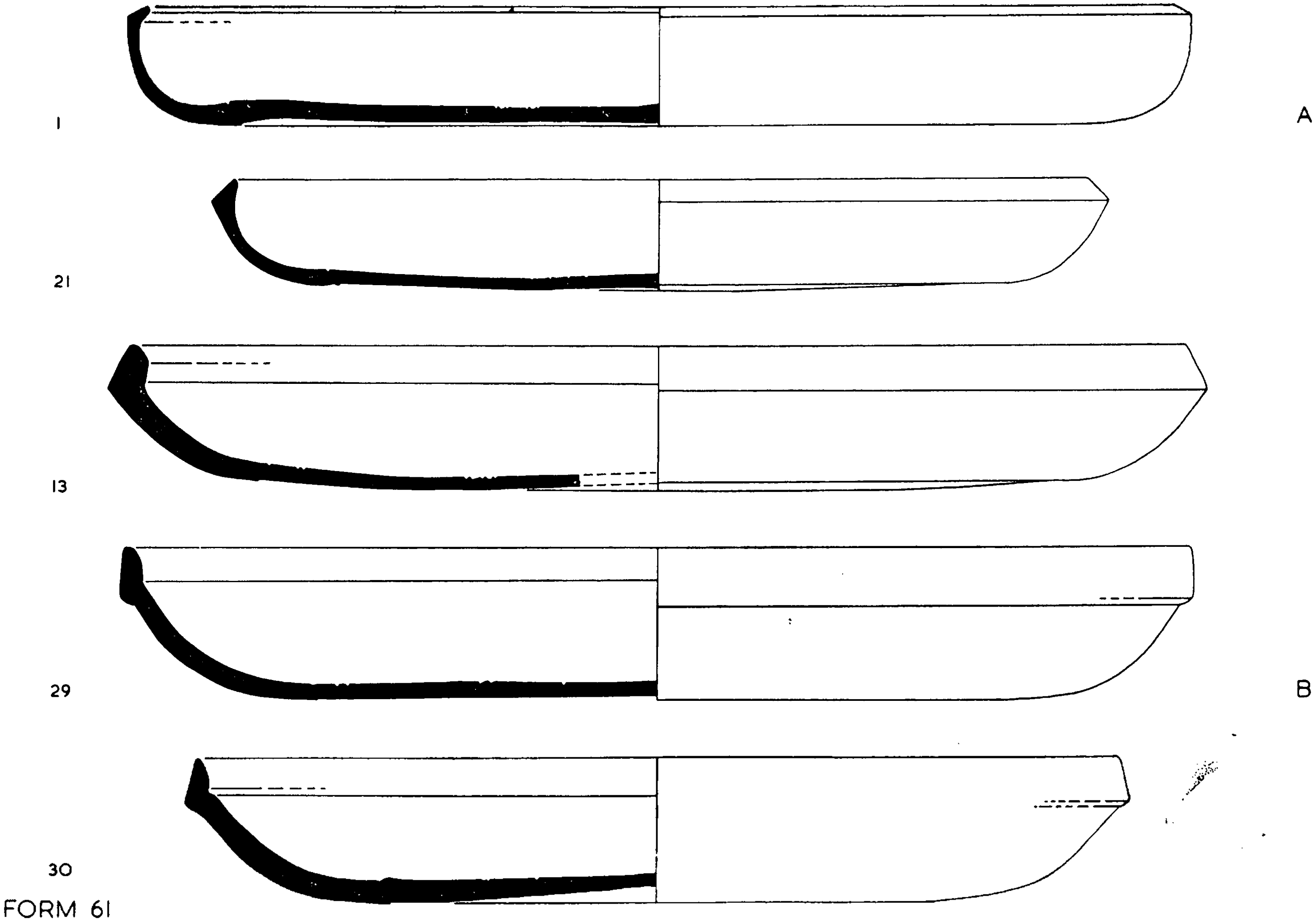


FIG. 16 Scale 2 : 5

Similar. Decoration: inner zone of palms and circles; outer zone of palms (sideways) and grilles, alternating; grooves round each.

12 Athens, Agora P 7614. Fragmentary; est. D. (rim) 27·4. Similar; rim more upright, with convex exterior and slight overhang. Decoration: inner zone of palms (Type 4), with triple circles (Type 26) between; outer zone of similar circles and grilles (Type 71); triple groove round each.

*13 Troy 33.137, in Istanbul. D. 42·0/40·3. Similar, but with thick rim, making slight angle with wall on inside; rather shallow wall, sagging floor. Two grooves near edge of floor. Decoration: radiating palms (8 or 9, probably Type 3), with grilles (Type 69) between, surrounded by quintuple groove; centre missing.

14 Lepcis Magna, Serapeum C 11. D. *c.* 38·2/36·4. Fragmentary. Rim similar. Most of floor missing.

15 Tipasa, Maison des Fresques; Baradez (1961) 126, pl. III.1. D. (max.?) 29·5. Rim upright, with overhang at bottom; wall fairly steep. Decoration: six lozenge-shaped motifs (Type 97), radiating from a circle at centre, with fringed circles (Type 36) between, surrounded by two broad grooves.

16 Herdade do Carrão, Vila Fernando, Portugal; *Crónica del III Congreso Nacional de Arqueologia* (*Galicia, 1953*) 569, pl. I. 1 (following p. 578). D. (max.) 34·0. Exact form uncertain (as **13**?, **17**?). Rivet-holes indicate ancient repairs. Decoration: 6 radiating palms (Type 4), with rosettes (Type 44B) between; surrounded by a quadruple groove.

17 Ventimiglia; Lamboglia (1963) 198–9. D. *c.* 34. Rather upright rim (as **12**), with long shallow wall. Decoration not indicated.

No stamps

*18 Copenhagen ABc 749, from Sidi Daoud; *CVA Copenhague* 7, pl. 311.2. D. (max.) 24·7. Profile similar to **1–2**. Triple groove round centre, with another groove 1 cm. further out.

19 Leiden; Holwerda no. 634, pl. V. D. (max.) 26. Rim slightly less incurved, tending towards **21**. Grooves on floor.

20 Algiers, from Draria el-Achour; Camps (1955) 235, fig. 5.4. D. (max.) 29·6. Similar. Two (?) grooves on floor.

*21 Istanbul 5379, from Sabratha. D. 34·3/32·7. Profile and grooves as **4** above, but without stamps. Slip covers whole of exterior of wall.

22 Copenhagen ABc 764; *CVA Copenhague* 7, pl. 311.3. D. (max.) 29·2. Similar; two grooves on floor.

Also: Esteva Cruañas (1962) 61–2 fig. 7.

Variant

23 Leiden H& 16; from Festour; Holwerda no. 632, fig. 14. D. (top of rim) 25·2. Angular projecting rim, with outer face chamfered at 45°, bearing two fine grooves, and inside vertical. Normal ware. Three rows of poor rouletting round centre of floor, two grooves further out.

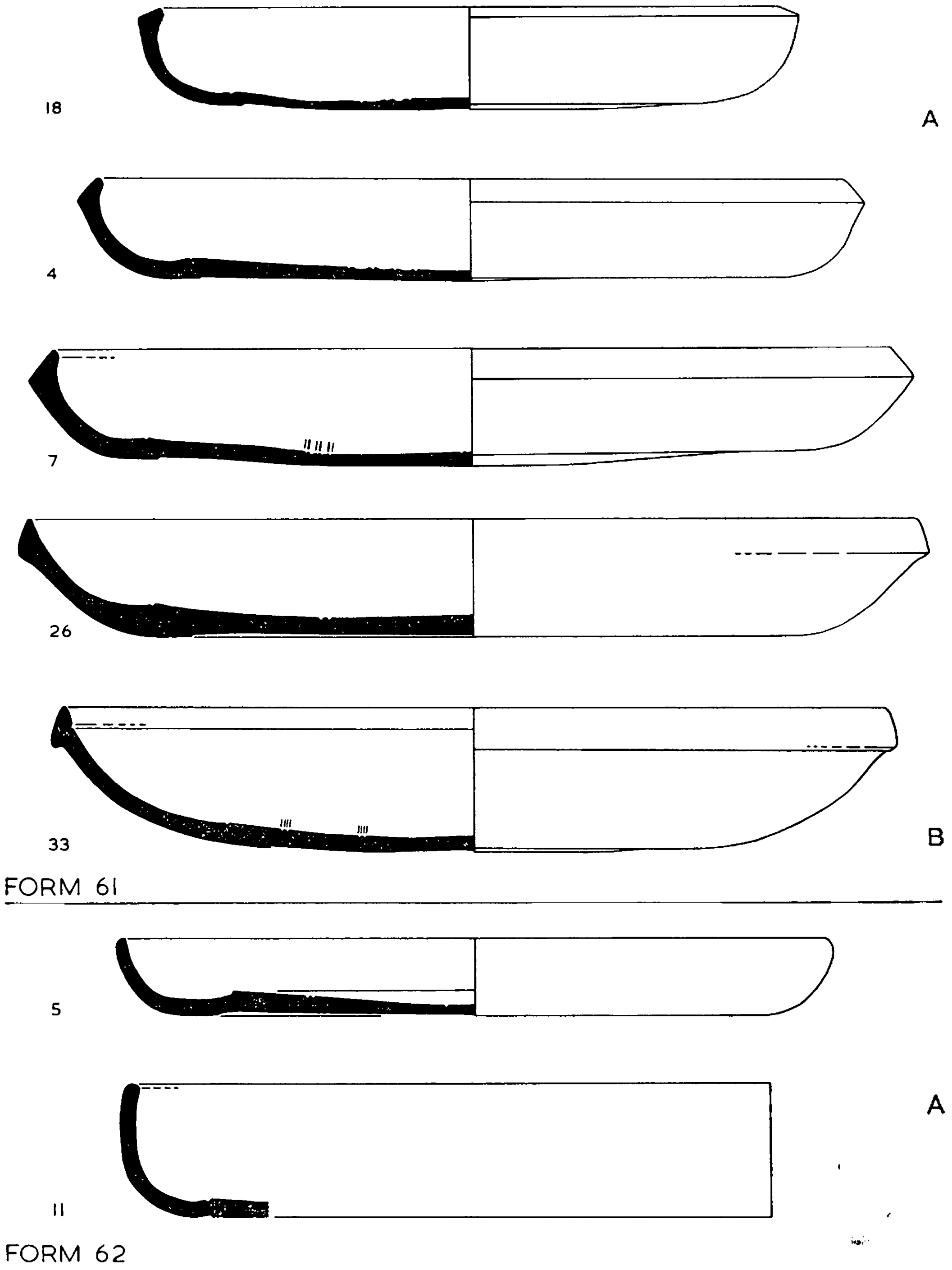


FIG. 17 Scale 2:5

Transitional

24 Antioch excavations; Waagé (1948) 48, pl. VIII, shape 831u. D. (rim) *c.* 30·4. Tall rim, with flat almost vertical exterior; long shallow wall. Two groups of two grooves on floor; decoration not indicated.

25 Tarragona, uncat.; Lamboglia (1963) 198–9. D. *c.* 36·8. Similar. Decoration not indicated.

*26 London Museum, Layton Coll. P 94. D. (rim) 33·4. Rim slightly overhanging, continuing slope of wall on interior; wide base. Two grooves on floor; no stamps.

27 Sousse Museum. D. *c.* 27. Similar. Slip rather thick and lustrous.

28 London Museum, Layton Coll. P 102. D. 23·4. Form as **26**, but with flat vertical exterior to rim and groove on underside where it meets wall. One groove on floor; no stamps.

Type B

*29 Mainz RGZM O 13850. D. 40·7. Tall rim, vertical on outside; steep wall, broad base (cf. **15**). Slip covers whole of exterior wall. Two grooves near edge of floor (cf. **13**). Decoration: 10 palms (Type 5), set radially, in a band round floor, with rings (Type 42) stamped irregularly between them; bordered by grooves (2 on outside, 1 on inside). Centre undecorated. PLATE XV*a*.

*30 Vatican, Museo Sacro 1327. D. 35·3. Rather more open form, with triangular rim, marked off on inside by a groove. Decoration: 8 grilles and 8 groups of four circles (Types 70B, 43) alternating in a band round floor; layout as on **29**.

31 London Museum, Layton Coll. P 101. D. 25·2. Similar, smaller. Decoration: four palms (Type 1) radiating from a groove round centre; surrounded by two grooves.

32 Leiden H III Z 9; Holwerda no. 633, fig. 14, pls. V, X; *Rijksmuseum . . . Gids voor de Verzameling van griekse Vasen* (1955) 36–37, fig. 20. D. 30·1, H. 6·0. As **30**, but rather deeper; long curving wall. Thick glossy slip (as that of sixth-century wares). Decoration: two grooves on floor, enclosing a narrow band bearing 9 palms (Type 3), set sideways. Groove round edge of floor.

*33 London Museum, Layton Coll. P 95. D. 30·8. Open form, with long shallow curving wall (as last); hooked rim, with a groove on inside. Bright slip. Decoration: two groups of grooves on floor, enclosing a a band with 19 toothed rings (Type 41). PLATES XIV*a*, XV*b*.

34 Valencia, from Torre del Mal Paso; Fletcher Valls, *Arch. Prehist. Levantina* v (1954) 197, 210, pl. V, 1; Lamboglia (1963) 198–9 (under form 53). D. 33. A shallow version of **30** and **32**, with long shallow wall and fairly small base. Decoration: 8 (?) toothed rings (Type 41) in a band round floor, with grooves as on **29–30**; the centre is missing but was apparently undecorated. Lamboglia's drawing has the decoration misplaced, and omits one of the two grooves which surround it.

35 London Museum, Layton Coll. P 98. D. 27.0; D. of base offset 8·6. Rim as last, but more projecting; size of floor much reduced, with corresponding increase in length of wall. Two grooves under floor. Decoration: four toothed rings (Type 41) on the floor; no grooves. Ware rather coarse; slip worn, but perhaps originally bright. PLATE XV*b*.

36 London Museum, Layton Coll. P 100. D. 25·8. Simple variant, perhaps a derivative of pieces as **26–27**: triangular rim, with angle on inside, long wall and small floor. Rather gritty ware. Decoration: seven quadruple circles on floor (Type 27), surrounded by a groove.

This form, which has a long history, undergoes numerous changes. The development of the shape can be traced fairly easily in the earlier stages, but becomes less clear later on. In general the progression is from a type with a short steep wall with incurved rim to one with long shallow sloping sides and an overhanging rim. Stylistically earliest are a group of vessels (e.g. **1–2, 18**) with sharply incurved rims, resembling those of Form 49 (from which they may be derived). The characteristic chamfer is here almost horizontal. These pieces are of thinner fabric and better finished than the rest of the series. There follows a version with a less incurved rim, chamfered on the outside at about 45° to the vertical; this is the standard variety of Type A. The tendency is towards a more and more vertical rim, with a more sloping chamfer and, in some cases, a slight overhang at the bottom (see **12**). From here one development leads on to a type with a steep sloping wall and tall upright rim, clearly marked off both outside and inside (cf. **13, 15** and **29**). In another version the wall becomes shallower and longer at the expense of the floor, and the rim tends to assume a hooked shape (see **30–35**). This appears to be the latest version of the form; the vessels are characterized by a thick bright slip similar to that found on sixth century wares. Most of the unstamped pieces correspond to the earlier varieties of the form noted above, but a later development is attested by a number of rather crudely made pieces (**26–28**). These display the more open form of the late series, though their rims are of less developed shape, closer to such pieces as **12**, and their floors remain fairly broad; I class them as transitional. The stamped vessel **36** appears to be derived from them.

The earliest of the varieties listed above, including such pieces as **1** and **2**, bears decoration of Style A (i), and may therefore be dated to around the second quarter of the fourth century (see below, p. 219); no. **1** was found together with Form 59.1. The earliest securely dated example is **5**, from a group of *c*. 360–370.[1] **12** comes from a deposit of about the end of the century. The evidence from groups in the Athenian Agora and the Corfu group (see under Form 59) indicates that this form remained fairly uncommon until late in the fourth century, but then became popular at the expense of Form 59. It first appears in quantity in the Agora groups of the end of century. Type B first appears around 400; there are a few frs. in the Agora deposits just noted, and one fr. at Schaan.[2] **34** comes from a cave-deposit which produced coins of Gratian and Honorius or Arcadius, suggesting occupation in the

[1] Athens, Agora, Deposit C 10:3. Latest coins: Constantius Gallus (351–4), and SPES REIPV-BLICE issues of Constantius II (*c*. 355–361).

[2] Ettlinger (1959) 248, pl. 1. 17. Frs. of Type A: *ibid.* 247, pls. 1.16, 6.6, 12.1.

late fourth or early fifth century,[1] the style of its decoration (= A (iii)) indicates the latter date. The form does not appear to have lasted as long as Form 67 (see below), for it is not present in significant quantities in the Agora deposits of the third quarter of the fifth century, nor among the Karanis material. Its *floruit* appears to have been the first half of the century. It normally bears decoration in Style A (iii).

Suggested dates: Type A—*c.* 325–400/420.
Type B—*c.* 400–450.

FORM 62

Salomonson D4 b?

Flat-based dish, with curved wall and plain rim. Base defined from bottom of wall by a slight moulding (not an inset as on preceding forms); corresponding slight offset at edge of floor. Stamped decoration and grooves on floor. Two types, in different fabrics:

A in brownish or maroon ware of fairly good quality, with lime particles often prominent; matt slip, sometimes with 'twig-marks'. Cf. late pieces of Form 45 (and Form 68). Normally shallow, with sharply curving wall. Some examples are very large. Stamped decoration of Style B; a double rouletted band (see p. 282) is common on outer part of floor.
Three sizes: D. *c.* 19–24 (without stamps), D. *c.* 26–34, D. *c.* 45–55. Fairly common.

B in fine ware, generally orange-red, with thin slip over inside and wall; surfaces carefully smoothed. Cf. Forms 52–53. Deeper than Type A, with sloping, less curved wall. Some examples approach Form 50. Stamped decoration of Style C.
Size-range: D. 28–40, normally around 32–35. Fairly common.

Examples:

Type A

1 Tunis, Bardo, from La Skhira (A 17). D. 27·8. Flaring wall, curving up to rim; groove under edge of floor. Slip all over, with 'twig-marks'. Decoration: six palms (Type 3) radiating from two grooves round centre, with six rosettes (Type 44) around them; triple groove on outer part of floor.

2 Tunis, Bardo, from La Skhira (A 8). D. (rim) 28·6. Form similar; wall meets base at angle. Slip as **1**. Decoration: five triangular palms (Type 10) radiating from a groove round centre, and surrounded by a groove; two more grooves on outer part of floor.

3 Tunis, Bardo, from La Skhira (B 19). D. (rim) 29·2. Fairly steep curving wall; slight base-moulding. Slip as **1**. Decoration: four palms (Type 3), radiating from groove round centre, with four rosettes (Type 44) between. Two concave bands bearing rouletting, with a groove between (variant of double rouletted band), on outer part of floor.

[1] The piece itself is listed as coming from a lower level together with second century coins (Fletcher Valls, *op. cit.* 194, 195, 197), but must surely go with the later reoccupation which produced the coins cited above.

4 Tunis, Bardo, from La Skhira (B 6). D. (rim) 30·0. Similar. Slip brushed across underside from two directions, forming a criss-cross pattern; slight 'twig-marks'. Decoration: four palms (Type **9**) radiating from two circles at centre, with four grilles (Type 67) between, surrounded by two grooves. On outer part of floor, two concave bands bearing rouletting, separated by a plain convex band (cf. **3**).

*5 Corinth C-61-78. D. 26·8. Slightly inset base. Slip as on **4**. Decoration: five triangular palms (Type 10) radiating from a groove round centre, surrounded by two grooves. Wall less curved.

6 Tunis, Bardo, from La Skhira (A 28); Fendri, *Basiliques chrétiennes de la Skhira* (Paris and Tunis, 1961), pl. XXXIX. 2. D. 30·3. More sharply curved rim (as **3**); flat base, making angle with wall. Slip brushed across underside; 'twig-marks'. Decoration: 9 quintuple circles (Type 28) clustered round a groove; centre undecorated. Double rouletted band round floor.

7 Tunis, Bardo, from La Skhira (A 22). D. 31·0. Similar; rim thick. Slip all over, with 'twig-marks'. Decoration: as **6**; 8 quadruple circles (Type 27).

8 Tunis, Bardo, from La Skhira (A 9). D. 29·6. Similar. Decoration: 9 quadruple circles (Type 27) in band between two fine grooves. Double rouletted band round floor.

9 Tunis, Bardo, from La Skhira (B 7). D. 32·6. Similar, with low base-moulding. Slip as **7**. Decoration: centre plain; two grooves; six triangular palms (Type 9) alternating with six quadruple circles (Type 27). Round floor, double rouletted band (with two central grooves).

10 Tunis, Bardo, from La Skhira (A 34). D. (max.) 26·0. Form similar to **5**. Slip as **7**. Decoration: four triangular palms (Type 11), radiating from groove round centre. Round floor, a slightly inset convex band, undecorated.

*11 Lepcis Magna, Serapeum C 30. Fr.; est. D. 48. Steep wall, low base-moulding (cf. **3**, **4**, **9**). Decoration missing.

No stamps

12–13 Tunis, Bardo, from La Skhira (A 40, B 14). D. 23·9, 22·4. Sharply curved wall, low base-moulding. Slip all over, with 'twig-marks'. Recessed convex band round floor (as on **10**).

Type B

*14 Corinth CP 1525. Est. D. *c.* 31·0. Fragmentary. Form close to Form 50, with high flaring wall and tiny foot at edge of base. Ridge at junction of floor and wall; one slight groove near edge of underside. Two grooves on floor; edge of a stamp (Type 98?) preserved at break.

*15 Athens, Agora P 7934. Est. D. 33·6. (max. 34·4). Fragmentary. Low sloping wall, gently curved; low base-moulding. Two grooves near edge of floor. Decoration: five palms (Type 12) radiating from a fine groove round centre, with fringed circles (Type 34) between; surrounded by a recessed convex band between two grooves.

Two other examples (fragmentary), intermediate in form between **14** and **15**: Athens, Kerameikos, uncat. (centre missing); Univ. of Michigan 20975, from Karanis (stamped).

Fragments of both types occur in some quantity in the deposits of the end of the fourth century in the Athenian Agora; these include the piece **15**. Of slightly earlier date is no. **5**, the latest object in a family tomb which appears to have fallen victim to the earthquake of 365. I unfortunately do not know what dating-evidence may have been found with the pieces from La Skhira; some of these have decoration comparable with that of the Athens and Corinth pieces, but others are rather different. Those with round-ended palms (**1**, **3**, **4**) can probably be placed early in the series, perhaps around 350; the decoration of **2** is more or less identical with that of the Corinth dish. **6–8**, which have circle-motifs only, are probably later than the Agora series, going into the fifth century. In Type B, the Corinth piece **14** may be assumed to be earlier than **15** on account of its similarity to Form 50; this may also go back to near the middle of the fourth century. Both types would seem to have a similar date-range.

Suggested dates: c. 350–425.

FORM 63

Lamboglia 9B.

Flat-based dish, as Forms 58–61, but with vertical wall, curving in to meet base, and plain rim (cf. Form 62A). Two grooves on outside below rim; stamped decoration (Style A) and grooves on floor. Ware as Forms 59–61. Rare; large-sized.

Examples:

*1 Tolmeita, Cyrenaica. Est. D. *c.* 30·0. Fragmentary. Tiny bevelled foot. On wall, gouged decoration consisting of groups of three vertical slashes alternating with groups of three triangular dots; originally about ten of each. Floor decoration: radiating palms (Type 4), with grilles (Type 71) between, surrounded by a triple groove.

2 Ventimiglia (Cavalcavia, 1949–51); Lamboglia (1963) 186–7. D. *c.* 53. Three grooves halfway up wall; floor decoration not indicated.

3 Arles (1959 excavations); Lamboglia (1958) 275, form 2/9. Est. D. 22; fragmentary. Rim slightly outcurved. Centre of floor missing; no decoration indicated.

The style of the stamped decoration on **1** indicates a date for it around the last quarter of the fourth century. The other pieces are not closely dated.

FORM 64

Lamboglia 9A (?), Antioch 889.

Flat-based dish, as Form 63, but with more flaring wall. No grooves on exterior. Stamped decoration (Style A (iii)) and grooves on floor. Ware as Form 63, generally thicker and coarser. Uncommon.

Examples:

*1 British Museum (Br. and Med.) 1928.4–13.9, from Egypt. D. 39·0. Deep form, slightly carinated; slight foot. Thick bright slip. Decoration: eight grilles (Type 69), close-packed round a groove round centre,

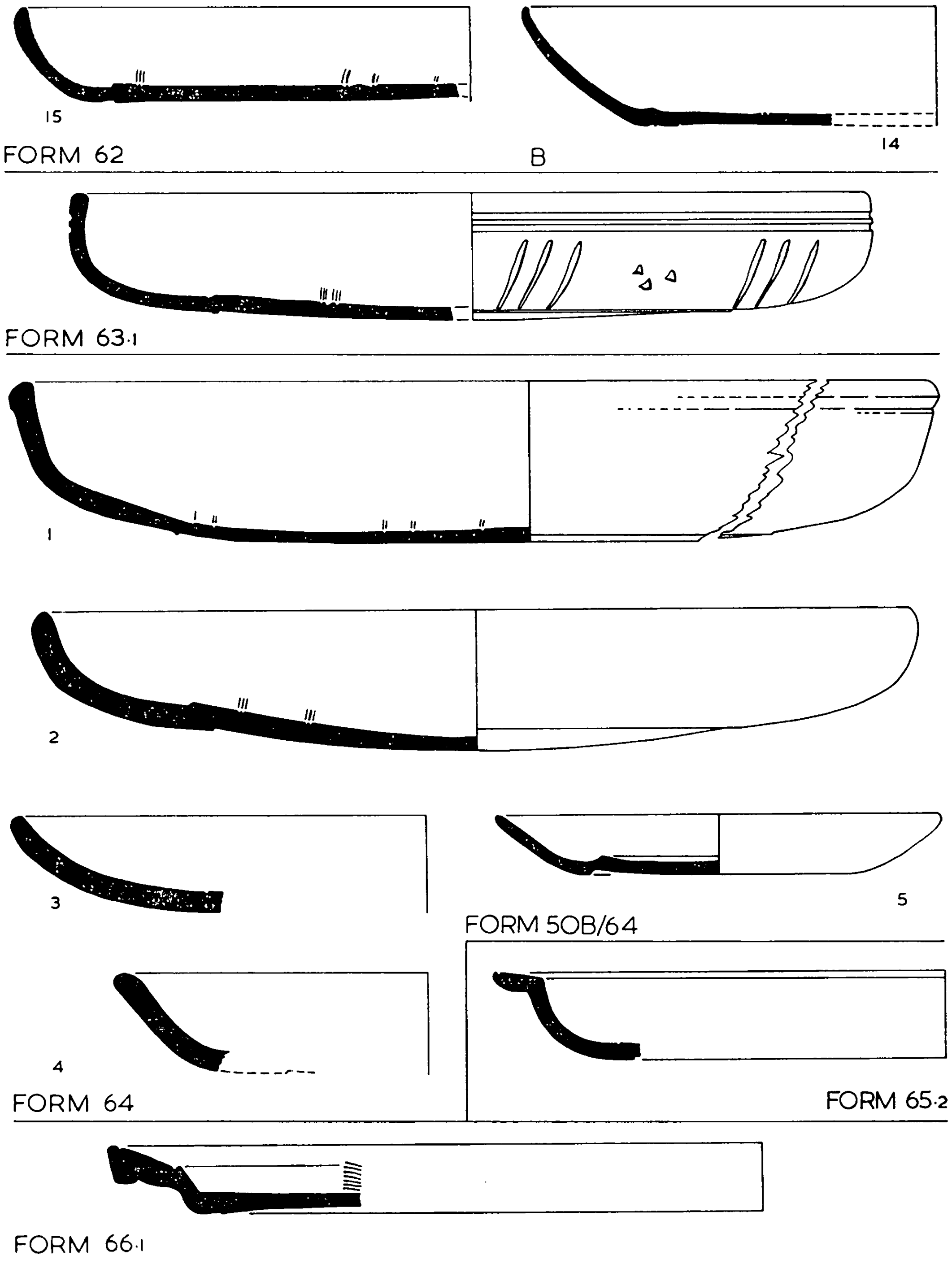


FIG. 18 Scale 2 : 5

and surrounded by two further grooves. Groove near edge of floor. PLATE XIV*b*.

*2 Copenhagen ABc 766; *CVA Copenhague* 7, pl. 311.4. D. (max.) 33·2. Shallower, more open form; sagging floor. Thick-walled fabric. Decoration in narrow band round floor, between two sets of two fine grooves: twelve chevrons (Type 77B), forming a star-pattern, with fringed circles (Type 36) between them.

*3 British School at Rome, from Veii area (S. Etruria survey, site 905882). Fr.; est. D. 31. Very shallow.

*4 American Academy in Rome, from S. Maria in Aracoeli (Capitoline). Fr.; est. D. *c.* 23·5. Small deep variant.

No direct dating-evidence. The shape of no. **1** indicates that this is the direct successor of Form 63; its stamped decoration (of Style A (iii)) indicates a date in the earlier part of the fifth century. No. **2**, of more developed form, should be later; **3** may represent a third stage in the development of the Form.

Suggested dates: early–mid fifth century.

A variant piece may be classed as Form 50B/64:

*5 Ostia 16077. D. 16·8. Shallow, with flaring wall; flat base with inset, ridge at edge of floor. Rather granular ware with smooth fairly lustrous slip. Undecorated. Presumably fifth century; perhaps a late variant of Form 50.

FORM 65

Flat-based dish, as Form 59B, but with plain flat rim bearing a groove at lip. Ware and decoration similar. Rare.

Examples:

1 Leiden H III Z 8; Holwerda no. 647, fig. 14, pls. V, X; Charleston pl. 23B. Broad groove at lip. Dull slip, pimply surface. Two triple grooves on floor (D. 14·7, 5·0), each decorated with a row of minute incuse rosettes (43 on the outer one, 8 on the inner; Type 46).

*2 Lepcis Magna, Serapeum C 10. Fr.; est. D. 34. Profile similar to **1**; floor missing.

(3–4 Burgos Mus., Spain, from Hornillos del Camino; *Mem. Mus. arq. prov.* vi (1945) 28, pl. V. 11–12. Ware uncertain (possibly imitations); similar form. D. 21·0, 26·2. Decoration in band round floor, between two grooves: on **3**, four small palms (Type 3 variant); on **4**, four similar palms, alternating with 4 triple circles (as Type 26).)

Date uncertain; the profiles of **1–2**, with their wide floors, suggest a fourth- rather than a fifth-century date. Perhaps no more than a variant of Form 59. The decorative scheme of **1** is unique.

FORM 66

Large plate, with broad flattened rim rising obliquely to a heavy hooked lip; rim offset from floor by a low straight wall. Outside of rim bevelled, top flat, with grooves at lip and inner edge (cf. upper member of rim of Form 68). Broad flat

floor with slight base-moulding. A counterpart of the bowl Form 68, in the same fabric; probably similarly decorated.
Size-range: D. *c.* 38–54. Rare; no complete profiles.

Example:

*1 Lepcis Magna, Serapeum C 31. Fr.; est. D. 49. Rouletting preserved on outer part of floor (perhaps part of a double rouletted band).

A similar piece from the Athenian Agora (P 27153) comes from a context of the latter part of the fifth century; its stylistic connections, however, suggest a rather earlier date. No examples have been found in fourth-century groups. It may be contemporary with the later pieces of Form 62A.

Suggested date: early fifth century.

FORM 67

Lamboglia 42, Antioch 869–873.

Large bowl with curved, slightly sagging body, flat base and two-part flaring rim. Ware as Forms 59–61, sometimes heavy and coarse. The rim consists of a flat member, rising gently, surmounted by a curved, everted member, hooked or rolled at the lip; the articulation of the two parts is usually blurred on the underside. The upper part of the rim is generally somewhat flattened on top, bearing a groove (sometimes two) at or near the lip; the rim-roll may be heavy. The flat base has a low moulding combined with a groove at the edge to produce a small false foot (sometimes triangular, like a reduced version of the foot of Form 45). The floor usually bears stamped decoration (of Style A) and grooves (cf. Forms 59–61); on some small and some late pieces the stamps are omitted.
Size-range: D. 20–45. Very common.

Examples:

*1 London Museum, Layton Coll. P 93. D. *c.* 33·1. Two grooves on rim, heavy rim-roll. Decoration: seven palms (Type 4) radiating from a groove round centre, with seven clover-leaves (Type 78) between; surrounded by triple groove. PLATES XII *b* and XIII *a*.

2 Musée de Mariemont (Belgium), from Sidi Ferruch (Algeria); Faider-Feytmans, *Musée de Mariemont* (1952) 158, pl. 57, R 87. D. 43·5. Decoration: nine palms (Type 4), radiating from two grooves at centre, with rosettes (Type 44B) at their tips and grilles (Type 67) between them; surrounded by triple groove.

3 Algiers, from Draria el-Achour; Camps (1955) 235, fig. 5.6, type V. D. 31·5. Decoration: seven (?) radiating palms (Type 3?) with grilles (Type 69?) between, surrounded by grooves.

*4 Lepcis Magna, Serapeum C 16. D. *c.* 40·6. Fragmentary. Groove and edge of a line of rouletting preserved on floor, probably part of a double rouletted band surrounding stamped decoration (lost).

*5 Athens, Agora P 12294. Est. D. 32·6. Fragmentary. Decoration: radiating palms (Type 3?) and rosettes (Type 44B), surrounded by triple groove; centre missing.

*6 Leiden H III Z 2; Holwerda no. 652, fig. 14, pls. V, X; Charleston pl. 22B. D. 31·3. Hooked rim, with broad groove on top, triangular foot. Brilliant glossy orange-red slip, perfectly preserved, covering inside and outer edge of rim; uniform orange self-slip on outside; faint smoothing-marks visible. Decoration: six small and neat fringed circles (Type 32), surrounded by two grooves; a groove at centre.

7 Univ. of Michigan 20976, from Karanis. D. 26·7. Foot as **6**. Decoration: six fringed circles (Type 30 var.), surrounded by two grooves.

8 Ventimiglia (1938–1940 excavations); *Albintimilium* i 160, fig. 92, no. 1; Lamboglia (1963) 192–3. D. *c.* 37·5. Fragmentary. Rim apparently very flat on top, with heavy roll at lip. Decoration: circles and decorated squares (Types 28, 90), alternating (4 of each?), surrounded by triple groove or similar.

*9 British Museum (Br. and Med.) 1928.4–13.8, from Egypt. D. 41·0. Intact (only half-profile drawn). Rim groove 1 cm. away from lip. Smooth glossy slip, well preserved, on inside and over rim. Decoration: two grooves round centre, four grilles (Type 71) and four clover leaves with whirl-fringe (Type 80), triple groove. PLATE XIII *b*.

10 Univ. of Michigan 7178, from Karanis. D. 38·9. Rim as **9**. Decoration: groove round centre, 5 grilles (Type 69) and 5 trefoil motifs (Type 83), alternating; surrounded by 2 + 2 grooves and slight inset.

11 Jerusalem (?), from Beit Jala; C. Clermont-Ganneau, *Archaeological Researches in Palestine during the years 1873–1874*, vol. i (London, Palestine Exploration Fund, 1899) 458, with fig. in text. Size unknown. Probably a vessel of this form. Decoration: 5 chevrons (Type 75) radiating from 2 (?) grooves at centre, forming a star-pattern, surrounded by 2 (?) grooves.

12 Univ. of Michigan 7179, from Karanis. D. 40·5. Decoration: band of 6 chevrons and 6 crescents (Types 75, 74), surrounded by triple groove.

13 Leiden H III Z 1; Holwerda no. 653, fig. 14, pls. V, X. D. *c.* 31·5. Hooked rim, as **28**, crude base; coarse fabric. Decoration: groove round centre; six grilles (Type 67), two grooves.

14 Copenhagen ABc 751, from Sidi Daoud; *CVA Copenhague* 7, pl. 309.7. D. 33·3. Base as **13**. Decoration: groove round centre, nine debased palms (Type 5), two grooves.

15 Petra; P. C. Hammond, *The Excavation of the Main Theater at Petra 1961–1962, Final Report* (London 1965) 17, pl. LIII, 3a–b. D. about 26. Decoration: groove, five dotted squares (type uncertain), groove.

16 Copenhagen ABc 750, from Sidi Daoud; *CVA Copenhague* 7, pl. 309.6. D. 35·6. Two grooves (separated) under base. Coarse fabric. Decoration: groove, seven crude crescents (Type 73), groove.

No stamps

*17 Corinth C–33–257. D. 27·0. Slight triangular foot. Five grooves on floor (the central one broad).

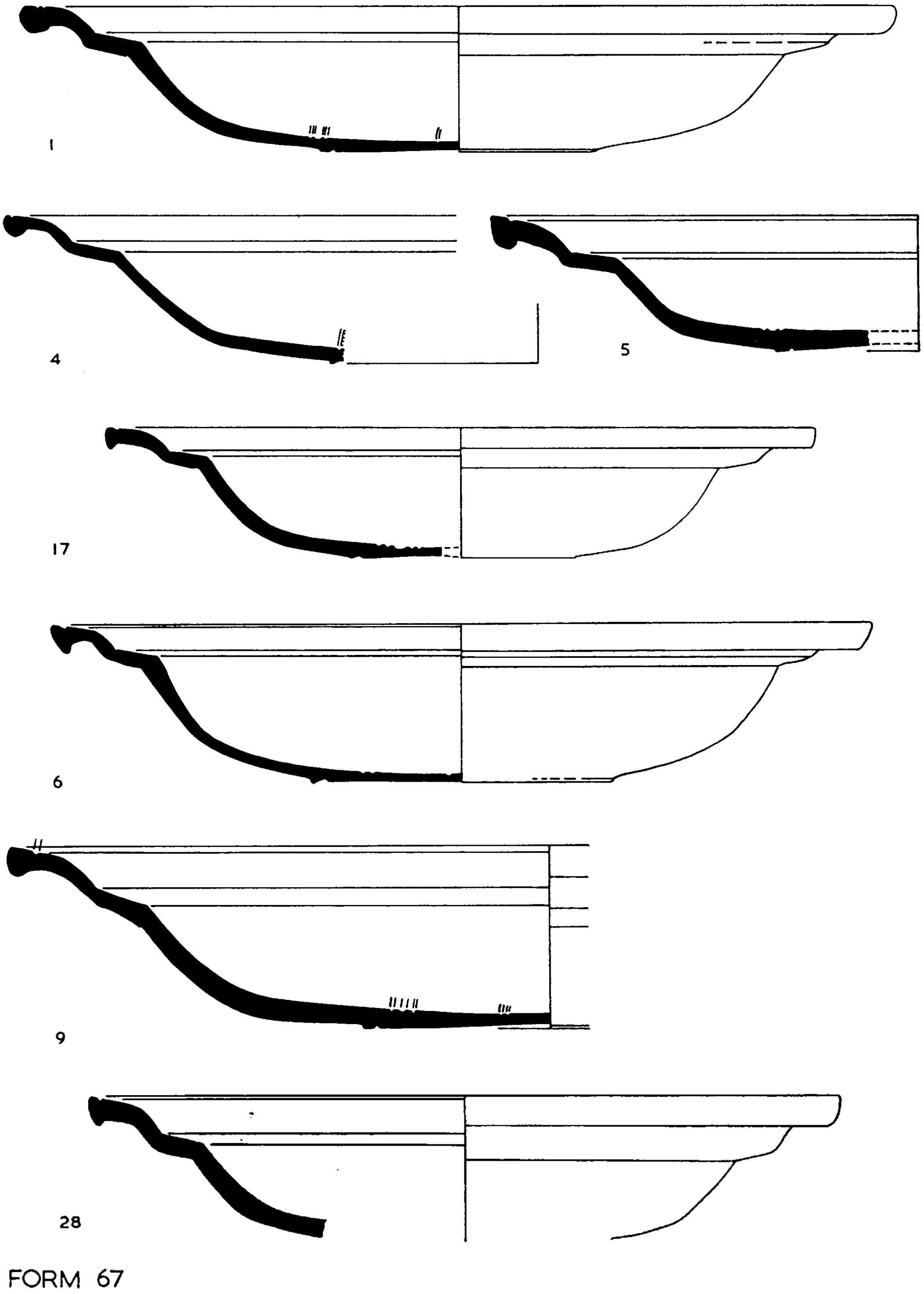


FIG. 19 Scale 2 : 5

18 Mainz RGZM O 11923, from Coto de Doña Ana (S. Spain). D. *c.* 22·5. Fragmentary. Two circles at centre, two grooves on floor.

19 Leiden H III Z 3; Holwerda no. 651, fig. 14, pl. V. D. 27·4. Form and fabric as **6**. No groove on rim, three grooves on floor.

20–21 Leiden HAA 35, HAA 36, from Beja area; Holwerda nos. 649–650. D. 30·0, 27·4. **20**: flattish rim, two grooves on floor; **21**: circle at centre, triple groove on floor; fine slip.

22 Copenhagen ABc 754, from Sidi Daoud; *CVA Copenhague* 7, pl. 309.8. D. 29·7. Two scratch-like grooves on floor, a third round centre.

23–26 Univ. of Michigan 7171, 7172, 20041, 20068, from Karanis. D. 24·0–33·1. Rims similar to **9**. Two grooves round centre (only one on **23**).

27 Univ. of Michigan 7170, from Karanis. D. 28·5. Rim rolled, with groove as on **9**; no groove under base. Two grooves round centre. Poor finish, with pimply surface.

*28 Athens, Agora P 27041. D. 28·6. Fragmentary; base missing (possibly stamped). Coarse fabric. Rim slightly hooked.

Late variant

29 Univ. of Michigan 7169, from Karanis. D. 30·7. Rim high, flattened on top, with heavy roll at lip; lower member reduced to a small ledge. Groove on underside set well back from edge of base. One groove on floor. Single stamp at centre: cross in heart (Type 285).

The shape of individual pieces does not reveal any very consistent development. As Waagé has noted,[1] a confusing variety of rim-forms are present, varying from hooked and rolled to merely thickened. The decorative schemes, however, serve to distinguish early and late pieces; in some cases these can be linked with pecularities of form. Form 67 does not appear as early as the corresponding dishes, Forms 59–61; the earliest varieties of stamped decoration (Style A (i)) are not found on it.

Three main groups may be distinguished among the stamped vessels. The first (**1–5**) comprises those with patterns based on radiating palm-motifs (Style A (ii)). These normally have a multiple groove border to the decoration, in some cases combined with a double rouletted band (cf. Forms 62A, 68); one or two circles are often present at the centre of the decoration. Vessels of this group are usually rather carefully made, and often quite thin-walled (see **4**); their rims tend to be neatly articulated, with a heavy roll at the lip. This seems to be the normal pattern on fourth-century examples. A second group bears decoration consisting of two alternating motifs set in a broad band round the floor between grooves, the centre being left undecorated (Style A (iii); see **8–10, 12**). The individual stamps on these pieces tend to be large and rather close-packed; grilles and chevron-patterns are popular. With them may be associated rims of the thickened variety, bearing a groove on top some distance away from the lip (see **9**); some pieces have feet of triangular shape. **6–7** appear to be an early version of this series. In the final group, which consists of coarsely made vessels, this scheme is simplified: only a single motif is used, in a band defined by one or two plain grooves (**13–16**). A thick lustrous slip is common at this stage (cf. Form 61B).

[1] *Antioch* iv. i 49.

A similar sequence may be postulated for the undecorated series. **17**, with its scheme of multiple grooves, appears to belong with the early stamped series; **19** is close to early pieces of the second group. Rather later, and related to such vessels as **8**, are the pieces with two grooves on the floor (**22–27**). As in the case of Forms 59 and 61, the early unstamped pieces are of smaller size than their decorated contemporaries, but during the fifth century this difference tends to disappear.

29, with decoration in Style E (i), must belong to the very end of the series. It provides a link with Form 93 and the series of stamped bowls of the sixth century.

Form 67 seems to have lasted for just over a century, from late in the fourth century to late in the fifth. The earliest examples may be dated around 360, for a few sherds are present in deposits connected with the earthquake of 365 at Araq el-Emir (Jordan).[1] The evidence from the Athenian Agora tends to confirm such a dating; the form is well represented in groups of the end of the fourth century, but does not occur in slightly earlier ones. **3** was found in the same grave as the late fourth-century dish, Form 61.10. The context of the Lepcis Magna piece **4** indicates a similar date. These pieces are characterized by rather neat decoration of the early type noted above; some examples bear double rouletted bands (e.g. Agora P 7794). The Agora piece **5**, rather less carefully decorated, may be slightly later, dating from the early years of the fifth centuiy. It comes from a deposit containing coins going at least as late as Arcadius (395–408). The early pieces of the second group, **6–7**, should date from the years around 400; a fr. with similar decoration occurred in the Athenian Agora in a level of this period (see below under stamp-type 35). Direct dating-evidence for the main series with decoration in Style A (iii) is slight; a date before *c.* 400 is however excluded. On stylistic grounds the pieces forming my second group should probably be placed in the first half of the fifth century. The Ventimiglia piece **8** formed part of a floor-deposit which could be interpreted as part of a more widespread trail of destruction on the site, presumably dating from the troubled times around and just after 400; however, this is somewhat conjectural. The decorative motifs and pattern of grooving on **10** have much in common with those on Forms 82–84. Evidence for the date of the third group is provided by the related piece **28**, from a context of *c.* 460–480 (latest coins: Leo I); a date around the middle or the third quarter of the fifth century seems appropriate.

Suggested dates: c. 360–470.
First group *c.* 360–420, second *c.* 400–450, third *c.* 450 +.
29 perhaps rather later than these (*c.* 460–90?).

FORM 68

Antioch 868.

Large bowl, as Form 67 except for rim. Good-quality fabric, similar to that of Form 62A: finely granular clay with some lime, generally brownish-red or maroon, well smoothed, with thin matt slip over inside and upper part of outside; sometimes 'twig-marks' under base. Rim consists of a V-shaped hollow moulding, surmounted by a broad flat member rising obliquely to a hooked lip; one groove at lip, groove(s) or slight offset above the hollow moulding. The rim mouldings are bevelled flat on

[1] 1961 excavations of the American Schools of Oriental Research. The pieces were kindly shown to me n Jerusalem by Dr. P. Lapp.

the inside and on the outer edge, producing a sharp angular profile. A number of variant schemes occur (see listed examples). Stamped decoration of Style B on the floor, normally combined with a double rouletted band; cf. Form 62A.

Size-range: D. 25–49 (mostly *c.* 30–40). Common.

Examples:

*1 Tripoli Museum (Libya), uncat. D. 32·4. 'Twig-marks' under base. No groove at lip. Decoration: five triangular palms (Type 10), radiating from a groove round centre, and surrounded by a double rouletted band.

2 Cornell Univ., bought at Carthage; Waagé (1948) 49, pl. IX, shape 868. D. *c.* 26·5. Similar: 'On floor, stamped palm branches radially set within doubly grooved and rouletted circle.' Groove round centre.

3 Sfax (?), from La Skhira; Fendri, *Basiliques chrétiennes de la Skhira* (Paris and Tunis, 1961), pl. XXXIX. 1. Size not indicated. Groove at lip. Similar; five triangular palms (Type 10) radially, alternating with five triple circles (Type 26) in a band round floor bounded on the inside by a groove, on the outside by a double rouletted band; centre plain, except for a small circle.

*4 Lepcis Magna, Serapeum C 35. Fr.; est. D. 44. Similar.

*5 Sabratha, unstratified (from old excavation dump). Fr.; est. D. 45. Upper part of rim short, almost horizontal, bearing grooves.

Variants

*6 Lepcis Magna, Serapeum C 37. Fr.; est. D. 44. Broad near-horizontal rim bearing two flat bands flanking a convex band, with small ridges between them.

*7 Sbeitla area (Brathay expedition, 1966). Fr.; est. D. 46. Rim similar to **6**, but rising obliquely in the normal manner.

A rival product to Form 67, with its own distinctive rim-profile. The stamped and rouletted decoration on this form is more or less exactly paralleled on the dishes of Form 62A, made in the same workshops. No. **1** appears to be one of the earliest examples; its stamps are very similar to those on the dated Form 62.5, indicating a date around the 370s. Fragments similar to **1–4** in shape and decoration are common in the levels of the end of the fourth century in the Athenian Agora, along with Form 67 (which preponderates). The variant forms with hooked rims are apparently later developments; their rim-profiles are related to those of the series of small bowls of the early fifth century (see Form 71). A few fragments with grooves on the exterior of the lip (as on Form 74) occur in Agora deposits of the latter part of the fifth century; these seem to constitute another late variant.

Suggested dates: c. 370–425, with late variants perhaps continuing to the middle of the fifth century.

FORM 69

Large dish. A rare derivative of Form 67, with similar body-profile, but a broad flat rim, hooked at the lip. Cf. also Form 76. Fabric as Form 67, with thick lustrous slip. Stamped decoration (Style A (iii)) on floor.

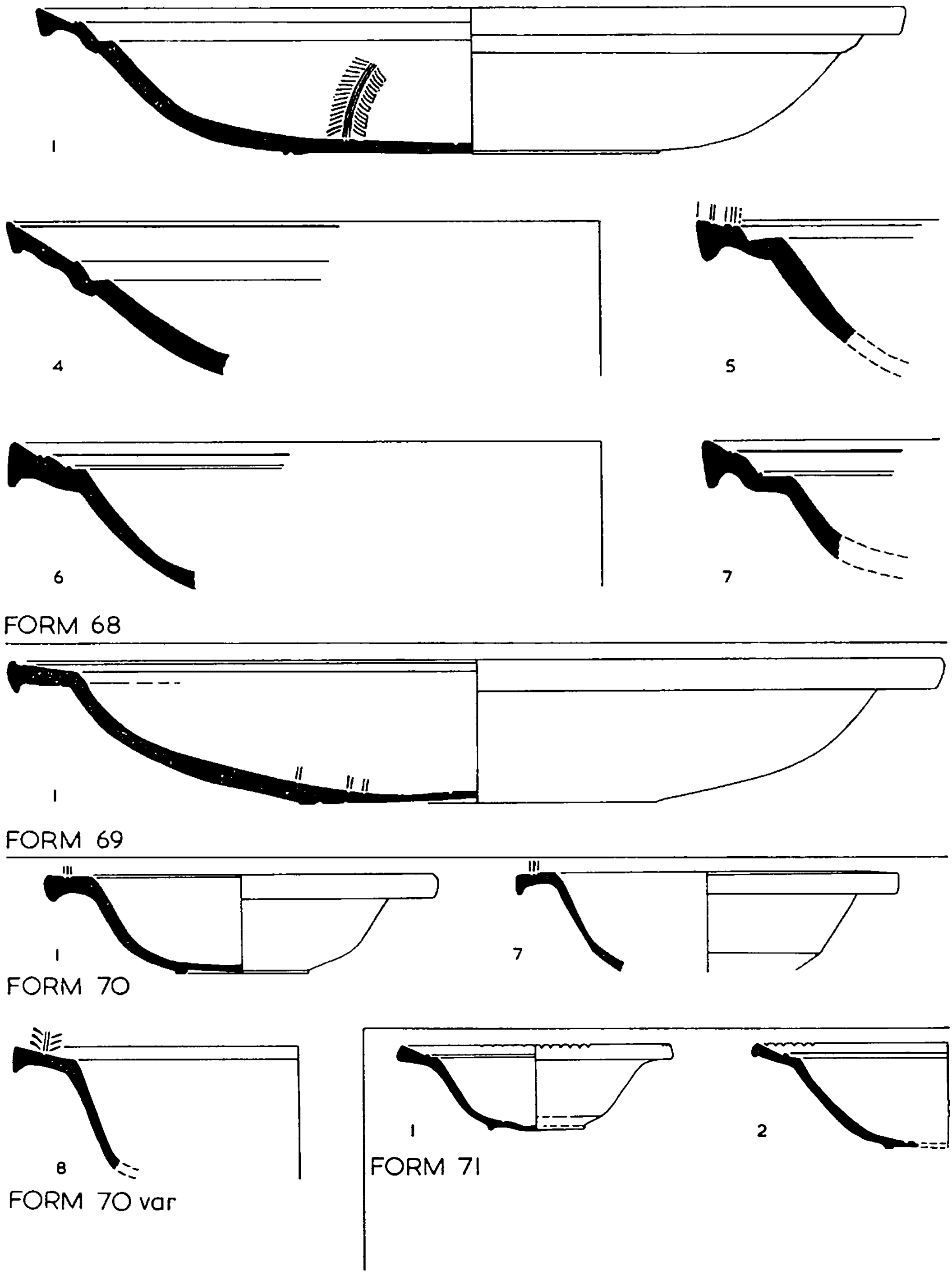


FIG. 20 Scale 2:5

One complete example:

*1 Leiden HEE 14, from Bizerte area; Holwerda no. 648, fig. 14, pls. V, X. D. 34·8. (max.). Broad groove on rim at lip; three grooves round floor, enclosing a band with 8 stamped 'sprigs' (Type 8); groove round centre. Two grooves near edge of base.

The fabric and treatment of the rim of this piece suggest a close connection with pieces such as Form 67.6; the stamped decoration is, however, cruder. It probably dates from around the second quarter of the fifth century.

FORM 70

Salomonson D3.

Small bowl, with steep wall, low foot and broad flat rim (cf. Form 52). Ware as Forms 62A, 68, brownish, with slip all over, and occasionally 'twig-marks' under base. Square-cut rim with hanging lip, bevelled on outside. Two grooves along middle of rim. Floor plain.
For size see listed examples. Uncommon outside Tunisia.

Examples:

*1 Copenhagen ABc 762, from Sidi Daoud (?); *CVA Copenhague* 7, pl. 309.5. D. 14·6. Rim thick, rolled at lip.

2–6 Tunis, Bardo, from La Skhira (A 20, B 20, B 24, C 5 and one unlabelled); Fendri, *Basiliques chrétiennes de la Skhira* (1961) pl. XXXVIII.2 (=**2**?) D. 13·8–16·1. Bevelled lips. Fabric of varying thickness, with 'twig-marks' visible on some.

*7 Athens, Agora P 22250; Waagé (1933) 294, pl. IX, no. 124. D. 14·2. Fragmentary. Carinated body; thin rim with bevelled lip.

For further examples, see Salomonson (1968) 124.

Variants

*8 Sabratha, unstratified (from old excavation dump). Fr.; est. D. 21. Double rouletted band on rim. Normal fabric.

*9 Sabratha, unstratified (from old excavation dump). Fr.; est. D. 20. Two lines of large rouletting covei rim, with two grooves at lip. Normal fabric.

No. **7** comes from a level which produced coins of Theodosius II (408–50). The excavations at Sétif have produced a fr. in a late fourth- to early fifth-century context (with coins of Constantius II).[1] Another fr. occurred at Abu Mena together with fifth-century material.[2] The double rouletted band on **8** suggests a late fourth- to early fifth-century date for this variant; the date of **9** remains uncertain.

Suggested date: first half of fifth century (and possibly a little earlier).

FORM 71

(Antioch 867.)

Small bowl, with steep wall, low angular foot and broad rim, related in form and fabric to Form 52. Top of rim bears sharp-cut mouldings, underside irregular, with

[1] Février (1965) 127, fig. 28 (G–H 1–2, level 3), no. 9. [2] Cat. no. 65/531.

wheelmarks; lip slightly hooked, bearing several groups of small triangular notches along its upper edge. One or more grooves on floor.

Two types:

A with rim composed of two flat bands separated by a small ridge; the inner one narrow and horizontal, the outer broader and sloping upwards.

B with rim bearing two flat bands flanking a convex band, with small ridges between them, as on Form 68.6.

Size-range: D. 9–16. Not very common.

Examples:

Type A

*1 Saloniki, Arch. Museum 5000. D. 10·3. Plain thickened lip; four groups of notches.

*2 Athens, Agora P 27044. Est. D. 14·6. Fragmentary. Part of a group of notches preserved. Two grooves on floor.

3 Argos (French excavations) C.3779. D. 11·3. Fragmentary. Rim as **2**; notches. Centre missing.

Type B (none illustrated)

4 Tunis, Bardo (ex Houdart Coll.). D. 15·7. Four long rows of notches on rim. Two grooves on floor.

5 Tripoli Mus. (Libya), uncat. D. 15·4. As **4**, without notches.

This is the only form among the series of small bowls with notched and punched decoration which is attested before the end of the fourth century. **2** is one of a number of fragments of Type A present in late fourth-century contexts in the Athenian Agora. Further sherds of this type occur in fifth-century groups here and elsewhere, though in these cases they tend to be outnumbered by examples of the forms which follow, which may be regarded as their successors. Type B is probably of early fifth-century date; the only example from a datable context is a sherd from Sétif, found in a late fourth- or early fifth-century level.[1]

Suggested dates: Type A—*c.* 375–400/420.
Type B—early fifth century.

FORM 72

Antioch 866 u.

Small bowl, as Form 71, but with different rim-form. Thin fine-grained clay with thin smooth slip on inside and over rim; cf. Form 52. Broad fairly flat rim, rising gently to a small knobbed or hooked lip. The inner face of the lip tends to be bevelled flat, and slightly inset from the rest of the rim. Grooves are common on the outer and inner parts of the rim; the centre may bear rows of punched dots. The top edge of the lip sometimes bears groups of small notches (cf. Form 71); the outside is occasionally grooved. Numerous minor variations. For a variant with

[1] Février (1965) 135, fig. 35 (GH 7 and 8, level 3) no. 12. Found with coins of Constantius II and Valentinian I (364–75).

appliqué decoration, see under Form 52. I group the various pieces into two main types:

A plain (mostly without grooves on the rim).
B with groups of punched dots on the rim, and a matching groove on the underside; generally combined with grooves, rouletting, small ridges, notching etc.

For size-range see examples below. Not uncommon.

Examples:

Variant (tending to Form 52)

1 Aguntum (Austria) A/678; W. Alzinger, *Kleinfunde von Aguntum aus den Jahren 1950 bis 1952* (Wien, Öst. arch. Inst., 1955) 14, pl. 2, no. 68. D. *c.* 17·8 (?). Rim near-horizontal, with plain lip (cf. Form 52); one groove at lip, two (?) along inner edge, five rows of 5 punched dots between. No floor grooves.

Type A

2 Sétif; Février (1965) 135, fig. 35 (GH 7 and 8, level 3) no. 11. No floor grooves. D. *c.* 15·4.

3 Djemila; Allais (1957) 40 no. 15 (illustrated). D. 16. As **2**. One circle at centre of floor.

*4 American Academy in Rome, from S. Maria in Aracoeli (Capitoline). Fr.; est. D. *c.* 15·4. Similar, with groove close to lip and another on underside of rim. Possibly = Type B.

Type B

5 Tunis, Bardo (ex Houdart Coll.). D. 15·1. Rim-profile as **4**; six rows of 5 punched dots. Two grooves on floor.

*6 Athens, Agora P 21514. Fr.; est. D. 18. Similar, with the addition of two grooves and a row of rouletting on inner part of rim; part of a long row of small notches preserved on lip. Eleven punched dots preserved (possibly from a continuous row).

For further versions, see Février, *op. cit.*, figs. 25–36 *passim;* the contexts of these pieces seem to be predominantly early fifth century. The Aguntum piece **1** may be earlier; the main coin sequence from the site (see Alzinger, *op. cit.*) ends with Theodosius I (379–95), indicating abandonment *c.* 400, though a slight later reoccupation is possible (one coin is tentatively assigned to Theodosius II). A sherd of Type B was found in a group of the first half of the fifth century in the Athenian Agora.[1]

Suggested date: early fifth century.

FORM 73

Lamboglia 57, Antioch 866 a–k.

Small bowl, as Form 72, with broad horizontal rim and raised lip, hooked on underside, in some cases bearing groups of notches on upper edge. Lip normally marked

[1] P 27172, from Agora Deposit A 21 : 1. Associated coins to Honorius; the pottery seems rather later.

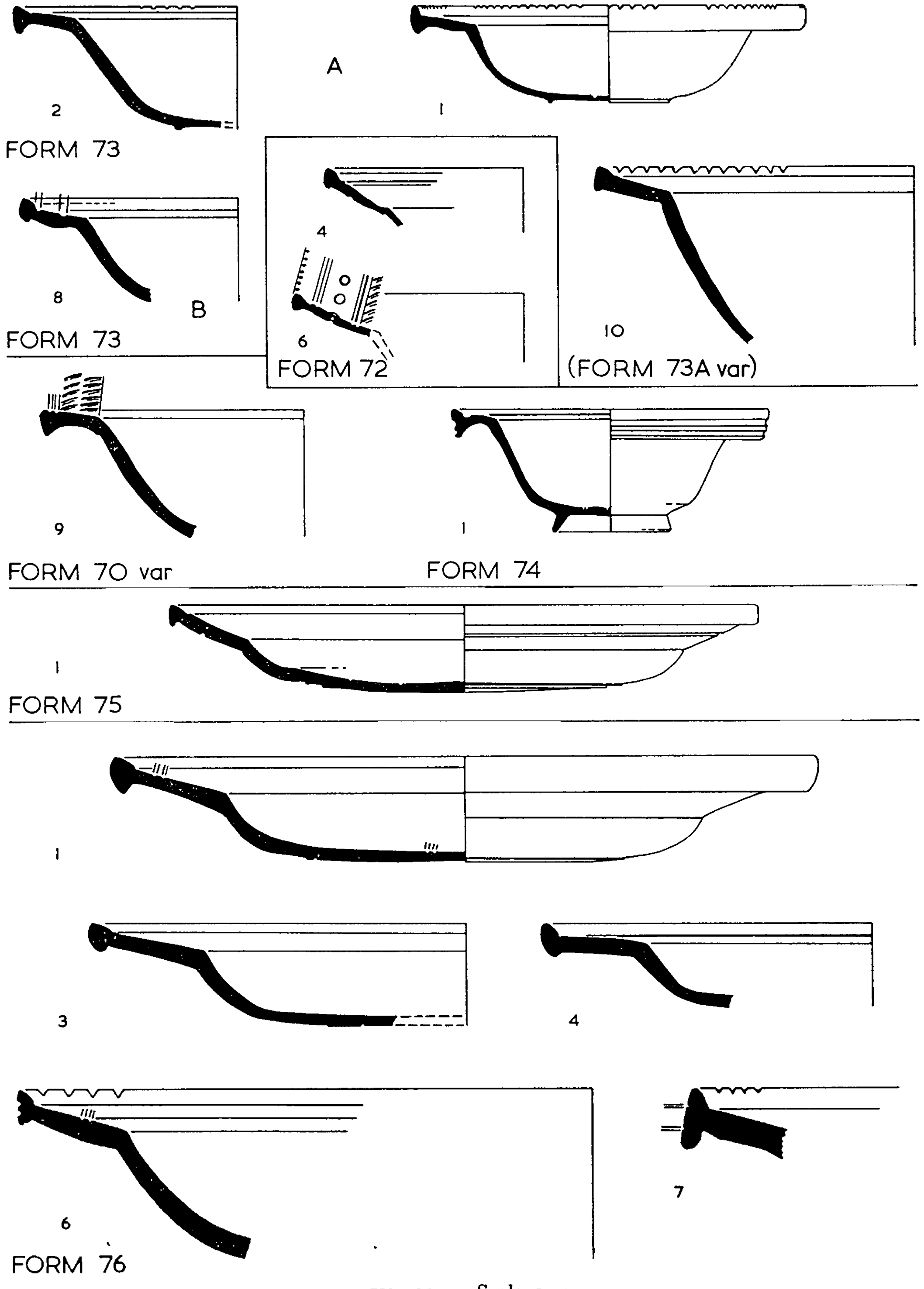


FIG. 21 Scale 2:5

off from rest of rim by a broad concavity. Ware rather thicker and less fine than that of Form 72. Two types distinguished:

A with top of rim undecorated; notches on lip normal.
B with a groove on middle of rim; plain knobbed lip.

Size-range: D. mostly *c.* 15–18; a few smaller examples (as **6**).
Type A not uncommon, Type B rare.

Examples:

Type A

*1 Leiden HNN 158, from Ksour es-Saf; Holwerda no. 630. D. 15·2. Fine thin-walled ware, with curved body-profile; upright lip without the usual concavity on the inside. Dull slip on inside and over lip; prominent smoothing-marks on outside. One circle at centre of floor. Seven long groups of notches on lip.

*2 Lepcis Magna, Serapeum C 24. Est. D. 17·2. Fragmentary. One group of five notches preserved on lip.

3 Tunis, Bardo, from Oudna. Est. D. 18; most of rim missing. Upright lip, with notches. One groove on floor.

4 Antioch excavations; Waagé (1948) 49, pl. IX, shape 866k. D. *c.* 16·5. Notches on lip. No floor grooves.

5 Tripoli Mus., uncat. D. 16·6. Rim as **2**. Rather thick coarse ware (cf. Form 76). No notches. No groove on floor.

6 Arles, uncat.; Lamboglia (1963) 204, form 57. D. *c.* 10·5. As **5**.

7 Copenhagen ABc 761; *CVA Copenhague* 7, pl. 312.15. D. 15·5. Raised lip without hook below, undecorated.

Type B

*8 Tocra (Cyrenaica), unstratified. Fr.; est. D. *c.* 16·8. Fine-grained fabric, with slightly lustrous slip. One groove on rim.

9 Predjama (Jugoslavia); J. Korošec, *Arheološke Ostaline v Predjami* (Ljubljana, 1956) pl. XVI. 4. Apparently a piece of this form. Two grooves on rim.

Large variant (of Type A)

*10 Athens, Agora P 27045. Est. D. *c.* 24·6. Fragmentary. Row of large triangular notches on lip (apparently continuous). Normal fabric. Cf. Form 76.6.

The examples with notched decoration are probably mostly earlier than those without it. No. **1**, with its unusual body-form and high lip, could be the earliest in the series. The undecorated examples of Type A and Type B are related to the dish Form 76.

Several pieces of this form, mostly without notched decoration, are present in the Cistern deposit at Abu Mena, which may date from around 480,[1] indicating that it was produced well into the second half of the fifth century. The examples with notches on the lip should be earlier, at least partly contemporary with Form 72.

[1] For a brief summary of this group, see *Mitt. d. a. I. Kairo* xxi (1966) 186–7.

The context-material found with the variant **10**, which is unique, indicates a date in the first half of the fifth century.

Suggested dates: c. 420–475. Type B mainly late.

FORM 74

Small bowl, related to Forms 72–73, with steep wall, thin foot of medium height, and flat rim with hanging lip. Fabric as that of Form 73, sometimes fine, with a thin smooth slip, sometimes thicker, with a thicker more lustrous slip. Exterior of lip grooved; rim separated from lip by a concavity, which in a few cases bears rouletting. Grooved on floor. For a variant with appliqué decoration, see under Form 52.
Small; size more or less as **1** below. Rare; only one complete example:

> *1 Athens, Agora P 1947. D. 12·2. Fine fabric, with thin matt slip. Two grooves on outer face of lip. Two fine grooves on floor, with a small recessed knob at centre.

This piece comes from a group of *c.* 460–75 (latest associated coins: Leo I). A late version of the two preceding forms.

Date: around third quarter of fifth century.

FORM 75

Dish with broad flat base, low curved wall and broad flat rim, rising obliquely to a hooked lip. The counterpart of the bowl Form 72, whose rim-type it shares; same fine fabric. One or two rims with decoration as on Form 72B appear to belong here. Slight base-moulding, combining with a groove to create a foot (cf. Forms 67–68). Stamped decoration of Style D and grooves on floor.
Uncommon. One complete example only:

> *1 Mainz RGZM O 7046, from Bolsena. D. 22·4. Rim plain on top; groove underneath. Sagging base. Decoration: 8 palmettes (Type 118) and 8 trefoil motifs (Type 83), alternating, in a band round floor between two grooves. PLATE XVI*a*.

The stamped decoration of this piece is close to that of pieces of Form 82. A rim fr. with punched and rouletted decoration (as on Form 72) was found in the Agora excavations in association with early–mid fifth-century material.[1]

Probable dates: no. **1**—*c.* 420–450. Pieces with decoration on the rim may be slightly earlier.

FORM 76

Antioch 811.

Dish, fairly large, with flat base, low curved wall and broad flat rim rising gently to a knobbed rim; cf. bowls of Form 73. A coarser version of the preceding form, in a granular ware similar to that of Form 67, with a thin dull slip on the inside and over the rim, and rather pimply surfaces. Base similar to that of Form 67, with low base-moulding and groove near edge; sometimes a pair of grooves on the rim (cf. Form 73B). One complete example has a stamp at the centre.
Size-range: D. 25–36. Fairly common.

[1] Athens, Agora P 8089.

Examples:

*1 Univ. of Michigan 20791, from Karanis. D. 26·8 (rim)/27·2 (max.). Two grooves on rim. Two grooves round centre of floor. Thin dull slip.

2 Univ. of Michigan 7196, from Karanis. D. 35·4, D. of base 18·3. Two grooves near inner edge of rim; upright lip (as **4**). Groove under base some distance in from edge. Stamped quatrefoil motif (Type 47) at centre of floor, surrounded by a groove.

*3 Athens, Agora P 27056. Est. D. 26·8. Fragmentary. Slight groove at inner edge of rim. Base of reduced diameter, with groove as on **2**; centre missing.

*4 Athens, Agora (uncat.); Waagé (1933) 298, pl. IX, no. 174. Est. D. 25·4. Upright lip; no grooves on rim. Base missing.

Form 76 or 75

5 Sétif; Février (1963) 130 (?), fig. 4. D. *c.* 31·2. Rim with hooked lip and slight offset near inner edge; base plain and flat. Two grooves round centre of floor; no other decoration indicated.

Variants

*6 Olympia, uncat. Fr.; est. D. 44. Normal ware. Two grooves on rim; lip bears two grooves on outer face and large notches along upper edge (cf. Form 73.10; part of one group preserved).

*7 Sabratha, unstratified (from old excavation dump). Rim fr.; est. D. *c.* 40. Perhaps from a similar vessel. Rather finer fabric, suggesting a possible connection with Form 73.10; thick-walled. Lip similar to **6**.

One of the commoner forms in deposits of the third quarter of the fifth century in the Athenian Agora (with coins to Leo I); **4** is one such piece. The development of the Form is not clear; **2** and **4** may be early, on the basis of their rim-form (cf. Form 73.1). No. **2** was found together with a number of late fourth-century coins; the associated pottery suggests, however, a date around 450. The variants do not come from dated contexts.

Suggested dates: c. 425–475.

FORM 77

Large plate with shallow curving floor, small angular foot and thickened rim. Ware as Form 68. Rim continues line of floor; thickened below, with convex outer face and flat bevelled underside. Grooves and ridges at rim and round floor; decoration at centre uncertain. One example only:

*1 American Academy in Rome, from S. Maria in Aracoeli (Capitoline). Est. D. *c.* 50, D. of foot est. 21. Two frs., almost certainly from same vessel, giving rim and base; centre missing. Two fine grooves and a slight ridge at rim; a further groove (possibly one of several) preserved on outer part of floor.

Date uncertain, probably fifth century.

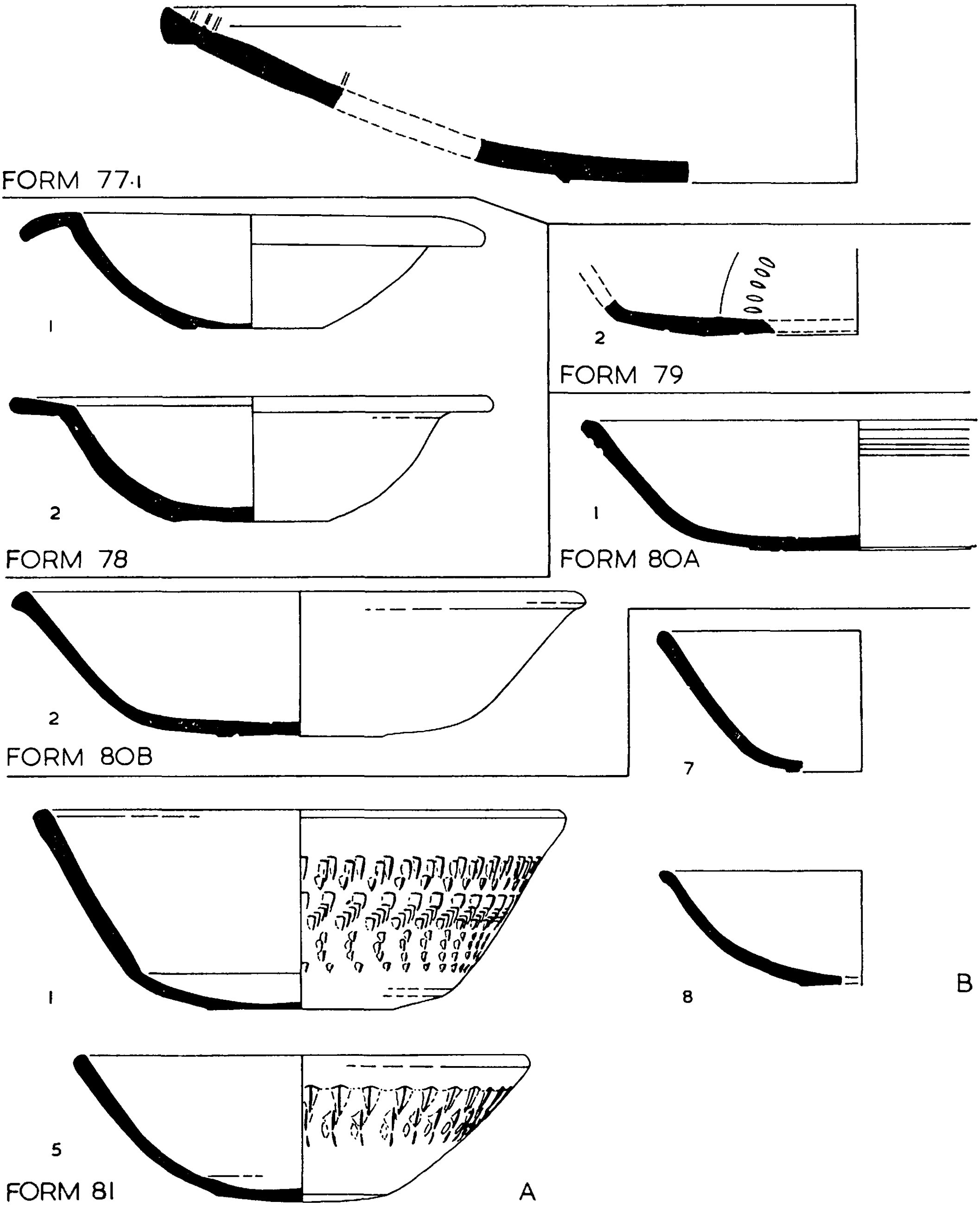


FIG. 22 Scale 2 : 5

FORM 78

Small bowl with plain rounded body, flat base and broad horizontal rim, flat or slightly downcurved. Coarse granular ware, with thick bright slip on inside and over rim. Rare.

Examples:

*1 Rabat Roman Villa, Malta, uncat. D. 16·9. Worn. Downcurved rim, slight groove under base.

*2 Ostia 16076. D. 17·6. Flat rim.

Date uncertain, probably fifth century.

FORM 79

Lamboglia 59.

Dish with carinated wall, flat base and rim with small external flange. Lower part of wall meets base at very shallow angle, and is decorated with one or more grooves. Granular fabric with bright slip, as last (?).
Uncommon.

Examples:

1 Ventimiglia 17968 (from Theatre); Lamboglia (1963) 205. D. (max.) *c.* 24·0. Two grooves on lower part of wall.

*2 British School at Rome, from Veii area (S. Etruria survey, site 812489). Fr.; est. D. of base 11. Probably this form. One groove on lower part of wall, a second under base. Inner part of floor marked off by a slight ridge, and decorated with a line of coarse rouletting; centre missing.

Cf. also Baradez (1961) pl. IV. 16–17, from Tipasa.

Date uncertain, probably fifth century.

FORM 80

Lamboglia 58.

Shallow bowl with straight flaring wall, curving in to meet a flat base of fairly small diameter. Rather fine-grained fabric, with smooth surfaces; thick lustrous slip on inside and over rim (some pieces of Type B are coarser). Low base-moulding; groove on underside, some distance from edge. Possibly stamped occasionally; see Types 274, 297 in Cat. of stamp types. Two types:

A with plain rim, marked off by two grooves.
B with slightly thickened rim.

Medium-sized (see examples below). Uncommon.

Examples:

Type A

*1 American Academy in Rome, from S. Maria in Aracoeli (Capitoline). Est. D. 20·2. Fragmentary. One groove on floor.

Type B

*2 Mainz RGZM O 13760 (formerly in a collection in Rome). D. 20·9. One groove round centre of floor.

3 Tarragona, uncat.; Lamboglia (1963) 204. D. *c.* 17·7.

The form of the base indicates some connection with Form 76; the fabric is similar to that of Form 73 and some early examples of the flanged bowls Form 91. The relative dates of the two types are uncertain. A rim fr. as Type B is present in the Cistern group at Abu Mena.

Probable date: mid–late fifth century.

FORM 81

(Antioch 893.)

Bowl, as Form 80 but deeper, with plain rim and plain flat base. Two types may be distinguished:

A with coarse rouletting covering much of exterior.
B undecorated.

Size-range: D. *c.* 15–20. Uncommon.

Examples:

Type A

*1 Leiden HAA 33, from Beja area; Holwerda no. 656. D. 19·3. High straight wall, with carination near base.

2 Leiden HAA 34, from Beja area; Holwerda no. 654, pl. VI. D. *c.* 16·0. As **1**, with finer rouletting.

3–4 Copenhagen ABc 715, 741 (**4** from Sidi Daoud); *CVA Copenhague* 7, pl. 312.4 and pl. 306.14. D. 17·1, 15·4.

*5 Leiden HNN 152, from Ksour es-Saf; Holwerda no. 655. D. 16·5. Shallower, with more rounded wall, sagging base. Four lines of coarse rouletting on wall.

Type B

6 Leiden, from Beja area; Holwerda no. 660, pl. VI. D. 15·7. Shape as **1**, rather shallower.

*7 American Academy in Rome, from S. Maria in Aracoeli (Capitoline). Fr.; est. D. 14·8. Base as Type A, with low moulding and groove (?).

Variant

*8 As **7**. Fr.; est. D. 14·7. Related to Form 80B: thickened rim, curved wall, small flat base. Coarser fabric, with pimply exterior; thick bright slip.

Date and development uncertain; related to Form 80, perhaps slightly later.

Probable date: second half of fifth century.

FORM 82

Antioch 806; cf. Lamboglia 55A.

Large plate, with flat or gently sloping floor, ending in an upright rim, and angular foot of fairly large diameter. Fine pure clean-breaking ware, often splintery, of medium thickness; finely smoothed surfaces with thin semi-lustrous slip on inside and over rim. Rim more or less triangular, bevelled flat on inside, and rounded below; outer face bears two (or more) grooves. Foot of medium height. Groups of fine grooves (combined with concave bands, sometimes bearing rouletting) on

floor, flanking one or more bands of stamped decoration of Style D; centre usually undecorated; two/three fine grooves round outer part of floor. On underside, between rim and foot, a broad band of 'feather-rouletting'. Two types are distinguished:

A with flat floor, tending to curve upwards at edge. Rim high.
B with sloping floor. Rim less prominent.

Size-range: D. 27–41. Fairly common.

Examples:

Type A

*1 Athens, Agora P 2496. Est. D. 26·6. Fragmentary. Decoration: band of dotted ivy-leaves (Type 110), between multiple grooves; centre of floor plain.

*2 Sbeitla area (Brathay expedition, 1964, site 50). Fr.; est. D. 30. Scheme similar to **1**; edge of stamped decoration visible on floor at break.

3 Cairo, Egyptian Museum,[1] from Ballana; Emery and Kirwan (1938) 81, 395–6, pl. 114, type 88c (= tomb 3, object no. 276). D. about 40. Three grooves on outside of rim. Decoration: band of lentoid flutes (Type 126) on floor, between two bands of multiple grooving; indistinct stamped motif at centre; third set of grooves above foot.

4 Narbonne, Mus. Arch. 4628; Lamboglia (1963) 202, form 55A. D. *c.* 35·5. Similar, with more pronounced upcurve on outer part of floor. Three grooves on rim. Three sets of grooves on floor. No indication of rouletting on underside or stamped decoration on floor.

Type B

*5 Mainz, RGZM O 9088, from Egypt. Est. D. *c.* 40·5–41. Fragmentary, rim missing. Shallow. Decoration: over foot, band of birds (Type 189A), between multiple grooving; round centre, band of fish (Type 173), pointing inwards, between multiple grooving. PLATE XVI*c*.

6 Salona, from Marusinac cemetery; E. Dyggve and R. Egger, *Forschungen in Salona* iii, *Der altchristliche Friedhof Marusinac* (Wien, 1939) 49, fig. 65. Est. D. 35·5. Fragmentary. Similar to **5**. Three grooves on rim. Decoration: band of birds (Type 181) round floor, between two sets of grooves; centre missing. No indication of rouletting on exterior.

*7 Athens, Agora P 684. Fr.; est. D. 33·6. Deeper, with more sloping floor. Three grooves on rim. On floor, a band of rouletting preserved, between two sets of grooves; centre missing.

8 Cairo, Egyptian Museum 71114, from Ballana; Emery and Kirwan (1938) 121, 395–6, pl. 114, type 88b (= tomb 73, object no. 53). D. about 40 (as **3**). Similar to **7**. Three grooves on rim. Decoration: at centre, 2 large jewelled cross-monograms (Type 300), side by side, surrounded by a broad band of 'feather-rouletting' between two sets of grooves. A line of rouletting and further grooves on outer part of floor.

[1] No. uncertain; possibly 71112.

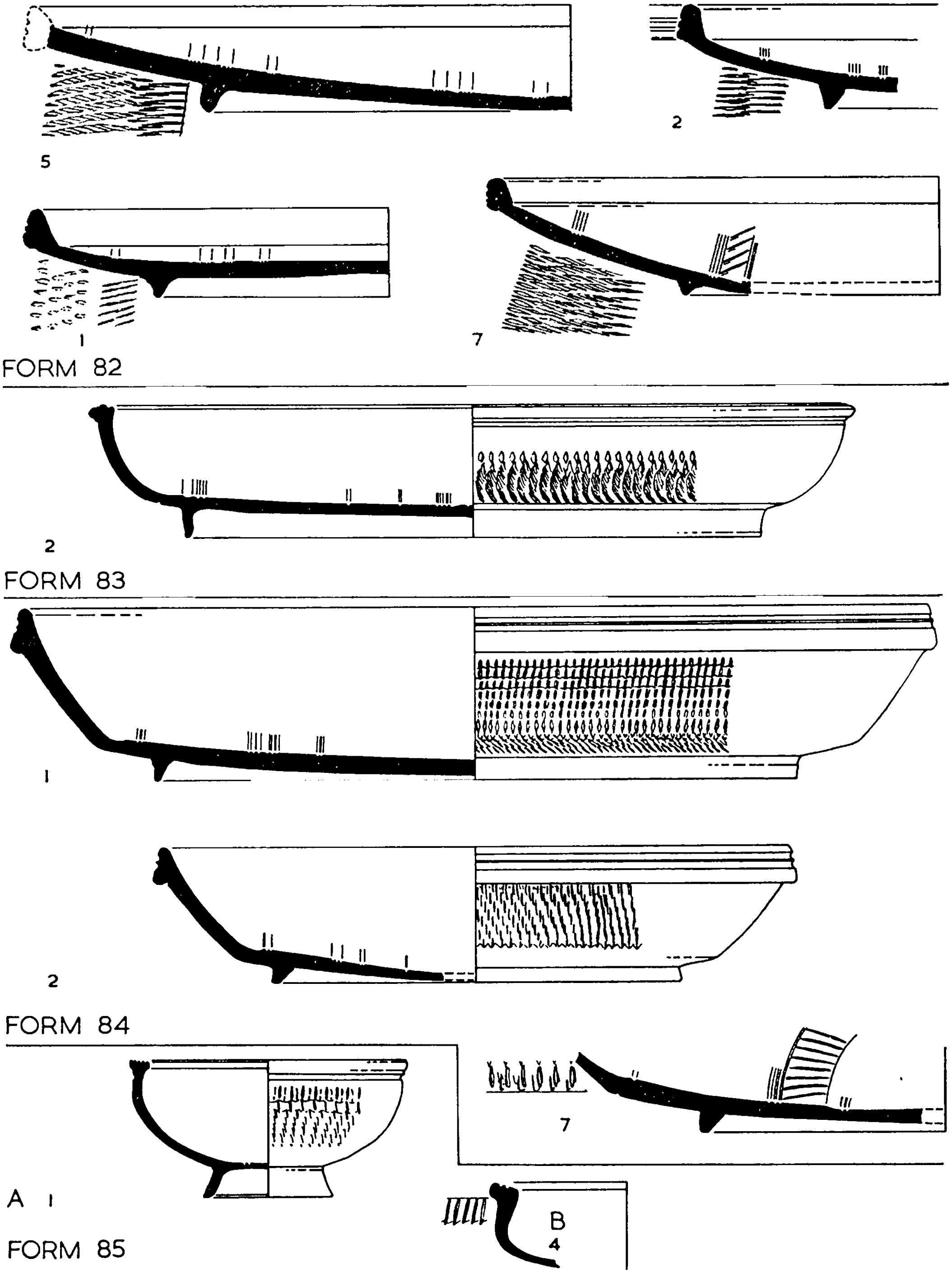


FIG. 23 Scale 2 : 5

Nos. **1–2** are early in the series, **7–8** late; the floral motifs of the former are still close to Style C, while the cross-monograms of **8** look forward to sixth-century motifs. Rouletting on the floor appears to be a late feature. Narrow bands bearing one repeated stamped motif are characteristic of this Form and of Forms 83–84, as is the multiple rouletting on the exterior.

A number of frs. of this form are present, along with Forms 83–85, in the deposits of *c.* 460–75 in the Athenian Agora (with coins to Leo I); no. **1** is the best preserved among them. The Agora fr. **7** comes from a group with early sixth-century coins; it may, however, be of rather earlier date. The two Ballana dishes were found together with amphorae of mid fifth- to mid sixth-century types. Similarities with the forms which follow indicate a mainly mid–late fifth-century date-range.

Suggested dates: Type A—*c.* 430–475.
Type B—*c.* 460–500 +.

FORM 83

(Antioch 829.)

Large dish with broad flat floor, resting on a thin high foot at edge, and steep curved wall terminating in a thickened rim, grooved on top. Fabric and decoration as Form 82, with feather-rouletting covering most of the wall. Two or more grooves along top of rim; normally a groove at base of wall, delimiting lower edge of rouletting. Grooves and stamped decoration (Style D) on floor.
Size-range: D. 28–35. Rather uncommon.

Examples:

1 Abu Mena (Egypt) 65.511. Fr.; est. D. 32. Profile close to **2**. Double rouletted band on wall, flanking a central groove. Two grooves on rim. Two grooves at edge of floor.

*2 Benaki Mus., Athens, 12436, from Alexandria (?). Est. D. 28·6. Fragmentary. Feather-rouletting on wall, with a groove below and a slight groove under rim. Two grooves and concave band at edge of floor. Decoration: grilles (Type 67) and dotted leaf-sprays (Type 120), alternating, in a band round centre between grooves; a recessed knob surrounded by grooves at centre. PLATE XVI *b*.

No well-dated examples. Frs. occur in the Agora deposits of *c.* 460–75 noted above, but are in the minority as compared with Form 84, which suggests that they may be survival-pieces. The same is probably true of **1**, from the contemporary Cistern group at Abu Mena. A piece from St.-Blaise[1] may come from a slightly earlier context. There is no indication that this form or any of the series Forms 82–85 began to be made before 400; however, the double rouletted band on **1** suggests an early fifth-century date. The stamped decoration on **2** should, on stylistic grounds, be no later than the middle years of the century (cf. that of Form 67.9–10, Form 75.1, etc.).

Suggested dates: c. 420–460.

[1] Rolland (1951) 184, fig. 179 right.

FORM 84

(Antioch 828.) Cf. Lamboglia 60.

Deep dish, corresponding to the plate Form 82; same fabric and similar decoration. Flat floor with sharp-cut foot near edge; steep straight wall, with triangular projecting rim. Exterior of rim flat, bearing two grooves, underside rounded. Feather-rouletting covers wall; sometimes with a groove at bottom. Slight offset at edge of floor, generally combined with grooves. Stamped decoration (Style D) and groups of grooves on floor. Some late variants have a sloping floor and more flaring wall, approaching Form 82B in shape.
Size-range: D. 20–35. Common.

Examples:

*1 Corinth C–65–13. D. (lip) 33·8. Decoration: narrow band of dotted astragal-shaped motifs (Type 140) round floor, combined with multiple grooves; centre plain.

*2 Athens, Agora P 1521/1946/2495. D. 23·5. Decoration: band of dotted leaf-sprays (Type 120) round floor, between grooves; centre apparently plain (a little missing).

3 Univ. of Michigan 20039, from the Fayoum. D. 27·0. As **1–2.** Decoration: band of almond-shaped stamps (Type 131) round floor, combined with three sets of two grooves; concave band between outer pairs of grooves.

4 British Museum (Egyptian Dept., uncat., ex Petrie), from Giza. Est. D. 23. Frs. Form and layout similar to **2**, with small circle at centre; band of lentoid motifs (Type 129) round floor.

5 Athens, Agora P 1875. Est. D. 22·0. Fragmentary. Form as **1–2.** Two lines of heavy rouletting cover wall. Decoration: two dotted cross-monograms (Type 289A) flanking circles at centre, surrounded by a narrow band with lozenges (Type 101) and a set of grooves.

6 Carthage, Lavigerie. D. similar to **5.** Similar. Decoration: two dotted cross-monograms (Type 289B) flanking circles at centre, and surrounded by two grooves.

Variant

*7 Louvre MNC 2319, from Lecourbe (Algeria); ref. *Bull. soc. nat. des Antiquaires de France,* 1898, 427, no. 130. Est. D. of foot 18·2. Fragmentary. Coarse rouletting on wall, with groove below. Decoration: dotted cross-monogram (Type 289B) preserved flanking centre, presumably one of a pair, surrounded by a band of rouletting between grooves. Inner part of floor slightly recessed.

A second fr. from Lecourbe (Louvre MNC 2320; *loc. cit.* no. 131) bears similar decoration.

This may be classified as the successor of Form 83; decoration such as that on Form 83.1–2 is not attested on it. The standard decorative schemes, which it shares with Form 82, are (a) a thin band of stamped vegetal or animal motifs round floor (**1–4,** cf. Form 82.1, 5–6), or (b) one to three stamped cross-monograms at the

centre, surrounded by subsidiary stamped motifs or a band of rouletting (**5–7**; cf. Form 82.7–8). Scheme (b) is probably not early, particularly when combined with rouletting.

This is the commonest N. African vessel-type in the deposits of *c.* 460–75 in the Athenian Agora (see above, under Form 82). Both schemes of decoration are present here, though pieces with rouletting on the floor are absent; **2** and **5** are the best-preserved examples. The form is not common in any other Agora groups; the few pieces from later contexts are probably irrelevant. Cypriot copies are present in the Cistern deposit at Abu Mena (see p. 375), of similar date, and a piece with sloping floor occurs together with late fifth- to early sixth-century material in the Kom deposit on the same site (cat. no. 67. 33). The material found with **1** could be mid–late fifth century.

Suggested dates: c. 440–500.

FORM 85

(Antioch 863.)

Small bowl, corresponding to Forms 82–84. Rounded body, with flat-topped rim, high thin foot; rouletting on exterior, grooves on rim, two grooves on floor. Two types:

A with hemispherical bowl, thickened, flat-topped rim, and feather-rouletting covering wall; cf. Form 83. One example only.

B with incurved wall, and heavier, everted rim bearing two grooves; amount of rouletting on wall varies.

For size see pieces below. Uncommon.

Examples:

Type A

*1 Athens, Agora P 1911. D. 10·3. Four grooves on rim. Feather-rouletting on wall, with groove under rim (cf. Form 83.2).

Type B

2 Tunis, Bardo, inv. 2586. D. 10·8. Fine feather-rouletting covers wall.

3 Tunis, Bardo (ex Houdart Coll.). D. 11·3. As **2**.

*4 Athens, Agora P 27136; Waagé (1933) 296, fig. 2, pl. IX, no. 135. Fr.; est. D. 10·3. One line of large rouletting on upper part of wall.

No. **1** comes from the same Agora deposits as Form 84.2 and 5, though stylistically it seems rather earlier. The stylistically later fr. **4** appears to come from a similar context.

Suggested dates: Type A—mid fifth century.
Type B—second half of fifth century.

FORM 86

Lamboglia 60.

Dish. A coarser version of Form 84, in thicker, granular ware with thick semi-lustrous slip over inside and rim (cf. Form 87). Foot mostly low and heavy; offset

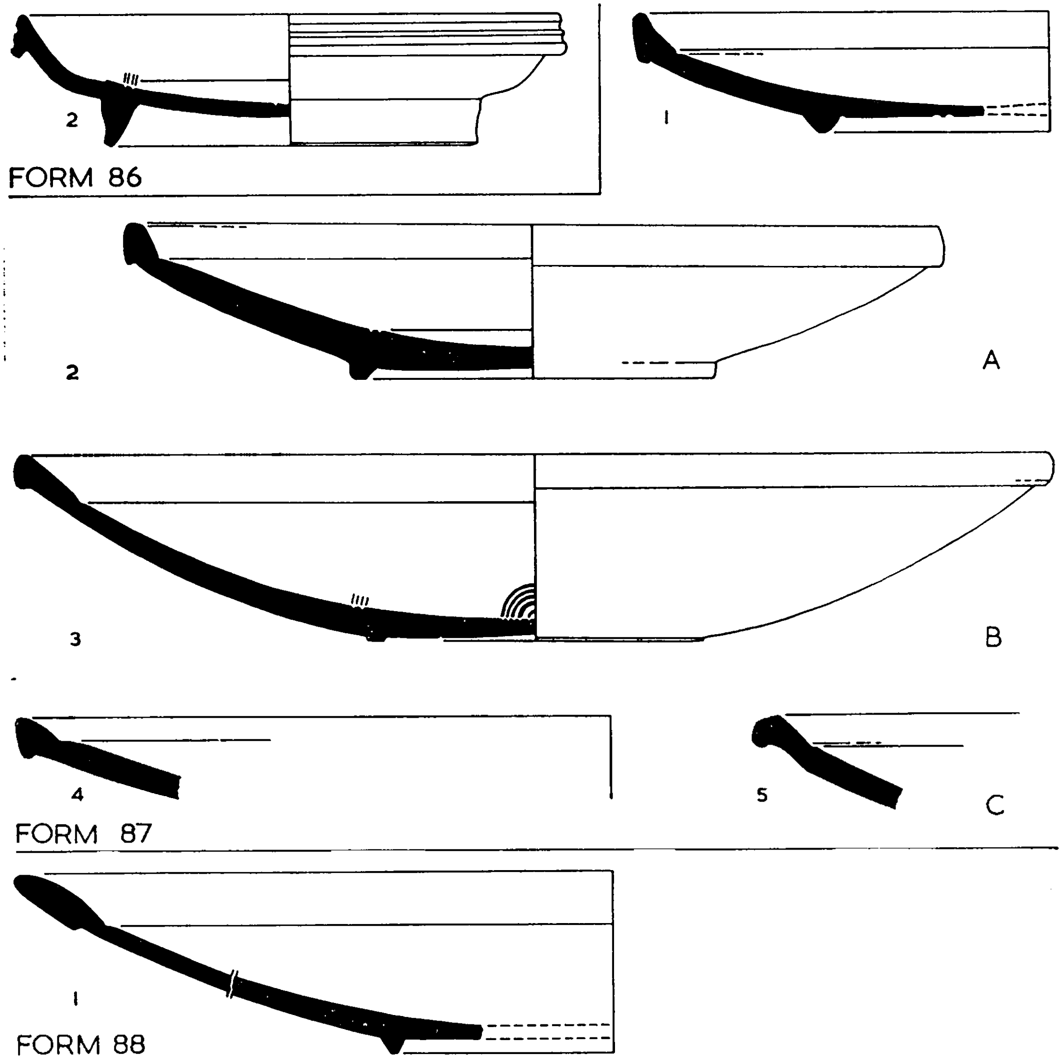


FIG. 24 Scale 2 : 5

at edge of floor. Triangular or hooked rim with two grooves. Sometimes rouletting on wall, coarser than on Form 84. Grooves on floor; no stamps attested. Medium size; see examples below. Rare.

Examples:

1 Arles, uncat.; Lamboglia (1963) 205. D. *c.* 18·4. Fragmentary. No rouletting.

*2 British Museum 57.12–18.164, from Carthage. D. *c.* 18·2. High foot. Rough exterior surface, without rouletting. Two narrow grooves round edge of floor, circle at centre.

Possibly the predecessor of Form 103. The fabric links it with Form 87 and the sixth-century dish series. The form occurs in late levels at Cosa together with late fifth- to early sixth-century material. Development uncertain.

Suggested dates: late fifth to early sixth century.

FORM 87

Antioch 810.

Dish with shallow floor, low heavy foot and knobbed or hooked rim, flattened on inside or top. Thick granular ware, with thick slip on inside and rim. Three types:

A with fairly upright knobbed rim, flattened or concave on inside. Sometimes burnished patterns on floor; alternatively, very light stamped decoration at centre, and grooves.

B with elongated rim, flattened on top, and marked off from floor by a slight offset; small hook at lip. Grooves on floor. Antioch 810f.

C with heavy squarish rim, raised above floor and downturned, with flattened top, and tendency to slight hook on underside. No complete examples preserved. Antioch 810a.

Size-range: 25–38. Rather uncommon.

Examples:

Type A

*1 Athens, Agora P 27155. Fr.; est. D. 28·0. Inside of rim concave; two grooves under base. Unpolished bands on floor; traces of simple burnished patterns on innermost one preserved.

*2 Corinth C–36–548. D. 27·2. Two grooves on floor; at centre, a small cross with bird on top (Type 309), lightly impressed.

Type B

*3 Lechaion (Greece), from early Christian basilica (1960 excavations). D. 34·8. Five circles at centre, two grooves on floor. Slight groove under base. Slip has soapy appearance; rather soft.

Variant

*4 Athens, Agora P 27157. Fr.; est. D. 40. Darker, fine-grained ware, with thinnish matt slip; perhaps a continuation of fabric of Form 68.

Type C

*5 Tocra (Cyrenaica), 1965 excavations, uncat. Fr.; est. D. 38. Thick polished slip.

Type A should be the earliest version of the form; a number of frs., with and without burnish-patterns, are present in the Agora groups of *c.* 460–75, including the piece **1**. The variant piece **4** also comes from here. B and C should be later; frs. of these are present in the earthquake deposits of 526 at Antioch (*Antioch* iv. i 57), and frs. of Type B were found in the floor make-up of the church of St. Polyeuktos at Istanbul, to be dated *c.* 526–7,[1] and in the same deposit as Form 88.1 below.

This form may be a direct continuation of Form 61B, with a low foot substituted for the inset base of the latter; the fabric is similar. One or two base frs. of this form have a central stamped motif of Style E (i). A piece from Tocra (64/187), with a stamp of this kind, appears to have a small knobbed rim of rounded shape;[2] this could be a predecessor of such pieces as Form 104C.23. If this is so, Form 87 constitutes one of the best links between the fourth to early fifth-century stamped series and that of the sixth century.

Suggested dates: Type A—second half of fifth century.
Type B–C—early sixth century.

FORM 88

Lamboglia 55B.

Large dish with sloping floor, small angular foot and broad thickened rim, continuing slope of floor. Fine-grained ware with well-smoothed surfaces and thin slightly lustrous slip over floor and rim. Rim slightly convex on inside, with a small offset at junction with floor, and flattish on outside, with a more pronounced offset. Finer counterpart of Form 87B?

Size as pieces listed below. Uncommon.

Examples:

*1 Athens, Agora P 27053. Est. D. *c.* 40·0. Fragmentary; profile restored from two frs.; centre missing. Low foot. Undecorated.

2 Vado (1954–56 excavations); Lamboglia (1963) 202–203. D. *c.* 41·5. Higher foot of triangular shape. Two grooves on floor.

One of a series of large dishes and plates (Forms 88–90) in fine fabric, possibly from the same workshops as Forms 82–85. Related in shape to Form 87; the fr. Form 87. 4 may be an early version of it.

No. **1** comes from a group of *c.* 520–540 (with coins to Anastasius I and possibly Justinian).

Suggested date: early sixth century.

FORM 89

Large plate with virtually flat floor, heavy knobbed rim and high pedestal foot with mouldings. Fabric as Form 88 (cf. also Form 56). Normally bands of rouletting and grooves on foot. Two types:

[1] For ref., see *DOP* xxi (1967) 278.

[2] Not joining the base fr., but apparently part of the same vessel.

A with relief decoration on floor, as on Form 56. Scheme: at centre, a rectangular panel of relief decoration, impressed from a single mould, with frame of grooves; around this, a double rouletted band; on outer part of floor, individual applied motifs between borders of grooves, with a further double rouletted band close against the rim. On foot, a large double rouletted band, with grooves above and below, bounded above by a projecting moulding.

B with stamped decoration on floor, or undecorated. Various schemes of rouletting and grooves on foot, sometimes with a moulding above.

Size: mostly very large; D. 38–64·5 (mostly around 45–50). Uncommon. All the known examples of Type A are listed below.

Examples:

Type A

*1 Vienna IV 2038, from Ephesus; Fuhrmann (1940) 93–99, pls. 10–11; ref. F. Eichler, *Führer durch die Antikensammlung* (Wien, 1926) 20; R. Noll, *Vom Altertum zum Mittelalter* (Führer durch das Kunsthistorisches Museum, Nr. 8, Wien, 1958) 15, no. 22; Salomonson (1962) 53–54, pls. XI.1, XIII.2, XIX.1;[1] *id.* (1969) figs. 13, 70 (details). D. *c.* 46·8. About half preserved; restored. Slip covers floor and all of rim. A number of fine scratch-like grooves at various places on underside. Decoration: centre panel with dignitaries at the arena; outer zone with *venatores* and lions (2 pairs), lion and boar (a fourth pair, perhaps similar, is missing).

2 Madrid, Mus. Arq. Nacional, from Saguntum (?); Fuhrmann (1940) 99, pl. 12 (with refs. cited); Salomonson (1962), 54, pl. XI.2; *id.* (1969) fig. 3; *Ars Hispaniae* ii (Madrid 1947) 170, fig. 168. D. 45·5. Profile and decorative scheme similar to **1**. Decoration: central panel with *venatores* and wild beasts; round floor, eight wild beasts.

*3 Benaki Mus., Athens, 12438, from Alexandria (?). Rim fr.; est. D. 48. Extra line of rouletting on underside close to rim. Applied lion preserved on outer part of floor.

Type B

4 Cairo 71110, from Ballana (tomb 114); Emery and Kirwan (1938) 150 (type 88a, see pl. 114). D. around 45. Shallow curving floor; no mouldings on foot. Decoration: large lightly impressed cross-monogram (Type 298) at centre, surrounded by a double rouletted band and grooves.

5–6 Cairo 71111, 71113, from Ballana (tombs 114, 122);[2] *ibid.* 150, 159 (type 88a, see pl. 114). D. similar to **4**. Flatter floor than **4**, undecorated; foot as **4**. The foot of **5** is decorated with two rows of long rouletting, with two grooves below; that of **6** may be similar. In both cases the outer face of the foot is flat, lacking any mouldings.

*7 Lechaion (Greece), from early Christian basilica (1960).[3] D. 64·5.

[1] Both Fuhrmann and Salomonson misquote the museum cat. number.

[2] I have not had the occasion to handle these pieces (and **4** above); hence the lack of full details. I cannot say which piece comes from which tomb.

[3] At present in Corinth Museum, together with the other finds from this site.

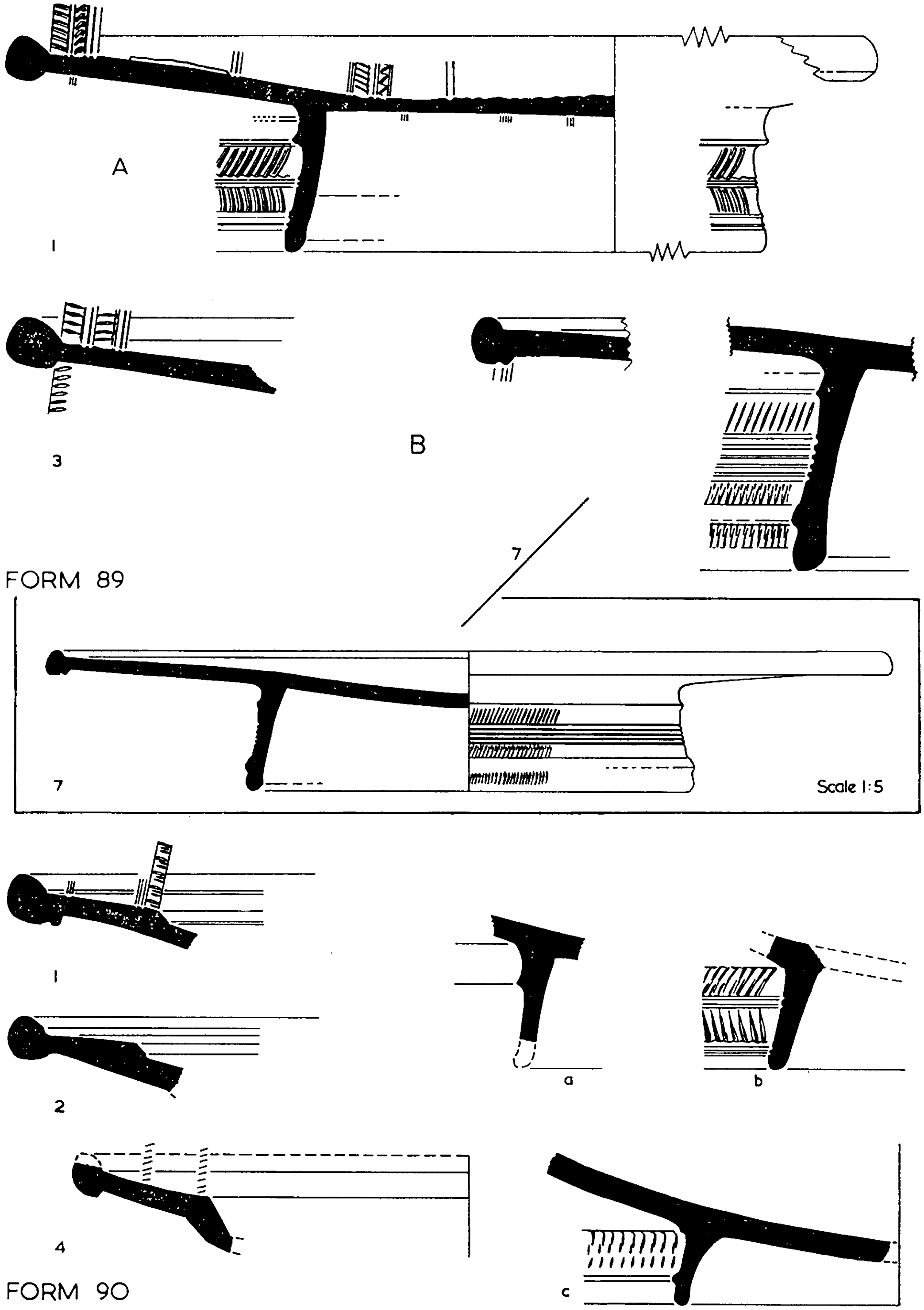


FIG. 25 Scale 2 : 5

Underside of rim grooved. Floor almost flat, undecorated. Very high foot, with mouldings at top and bottom, and two lines of rouletting and 5 grooves between; further rouletting below lower moulding.

A second fragmentary example from the same excavation has a foot similar to **5**.

8 Tipasa, Thermes de l'Est; Baradez (1967) 246, no. 23, fig. on p. 255. D. 59·3. Rim flattened on top, slightly hooked below. Foot rather lower than the above (H. 4·1), and plain. Groove on outside (cf. Form 104). Floor undecorated.

Type A is closely linked with the series of rectangular dishes of Form 56; similar *venatores* and wild-beast motifs appear on both. It would appear to go together with the later examples in the rectangular dish series. The decorative motifs on **1–2**, and their significance, have been fully discussed by Fuhrmann and Salomonson.

Type B appears to be a later version of the form, though at present little can be said about either its date or its development. The Ballana pieces (**4–6**) are probably to be dated mid–late fifth century, like Form 82.3 and 8 from the same site; the associated finds (mainly amphorae) are consistent with such a dating, though they could also be rather later. In general, a fairly early dating would seem preferable; one may note that **4** bears a variant of the double rouletted band similar to that found on Type A. The dating-evidence for the Lechaion examples still awaits publication. No. **8** is perhaps a forerunner of Form 104, to be dated in the early sixth century. For further base frs. related to Type B, see under Form 90.

Suggested dates: Type A—early fifth century.
Type B—probably mid fifth to early sixth century.

FORM 90

Large dish with shallow floor and heavy knobbed rim (as on Form 89); outer part of floor stepped up to form a flat ledge about 4 cm. wide. Fabric varies. Rim frs. only; foot perhaps high. Two types (possibly not directly connected):

A with low ledge, not matched by hollowing of underside, bearing grooves and rouletting. Fine fabric with smooth surfaces and thin slip. Perhaps to be regarded as a variant of Form 89.

B with higher ledge, generally undecorated. Rim smaller, and fabric coarse; some connection with the late Form 105 seems probable. The various listed pieces may not belong together; **4** might just be related to Form 76.

Not a very coherent form. Rare; no complete examples.

Examples:

Type A

*1 Mainz RGZM O 17545, from Egypt. Fr.; est. D. 45. Rim as Form 89. 7, with grooved underside, Fine grooves and line of rouletting on ledge; no floor decoration preserved.

Type B

*2 Delphi, uncat. (from church S. of Hellenikon).[1] Fr.; est. D. 38. The beginning of a downward turn (foot?) is visible on outside at break.

[1] For brief report on the excavation, see *BCH* lxxxvi (1962) 911–12.

3 Xanthos, Letoon, cat. no. 29 (from early church). Est. D. 38; fragmentary. Similar, with rather wider ledge; undecorated. Possibly to be classed as Form 105.

*4 Apollonia (Cyrenaica), from Byzantine Palace.[1] Fr.; est. D. (max.) 30. Low wall in place of step, creating a flat rim with knobbed lip. Two lines of fine rouletting on rim.

No. **1** may be connected with the later examples of Form 89. The rest appear to be considerably later. The Delphi fr. **2** was found together with frs. of Form 104 and pieces of local painted ware, suggesting a date around 550–600; **3**, which may be regarded as stylistically later, was associated with late sixth- to early seventh-century material. The Apollonia piece **4** may be of similar date.

Suggested dates: Type A—late fifth to early sixth century.
Type B—mainly second half of sixth century, and possibly later.

A number of base frs. with high feet seem to belong to plates and dishes as Forms 89–90. I illustrate three examples:

*a Tocra (Cyrenaica), 1964 excavations, uncat. Est. D. of foot 30+. Bottom broken off; exterior worn, but apparently undecorated. Moulding on upper part of foot (cf. Form 89.1–2). Fine fabric.

*b Athens, Agora P 22261. Est. D. of foot *c.* 26·5. Fabric rather coarse, with thick slip on floor. Large double rouletted band combined with two pairs of grooves on foot (as Form 89.1, but without the moulding above).

*c British School at Athens, from Naxos. Est. D. of foot 17. Large fr. Coarse fabric; slip worn. Moulding on foot, with three lines of rouletting above. Sloping floor.

Dates uncertain. The decoration of **b** suggests a fifth-century date. The fr. **c** may be a forerunner of Form 105.

FORM 91

Antioch 883, Lamboglia 24/25, 38.

Flanged bowl. Body almost hemispherical, with plain or slightly rolled rim; broad flange on exterior below rim, generally hooked at edge; low foot or flat base of small dimensions. Feather-rouletting on inside. Four types may be distinguished, corresponding to successive phases in its development:

A Fairly shallow open form, with low sharp-cut foot and broad flange with hanging lip, angular in profile, set just below small rolled rim. Feather-rouletting covers floor; two grooves on the wall above. Fine-grained ware with thin slip on inside and over flange (cf. Forms 52–53). Medium-sized. Uncommon.

B Deeper, with similar rim and flange, and low foot. Broad band of feather-rouletting on floor; no grooves. More coarse-grained fabric, with semi-lustrous slip on inside and over flange; exterior well-smoothed. Size: medium to large (rim D. up to 28). Fairly common.

[1] For the site, see R. Goodchild, *Antiquity* xxxiv (1960) 246–58, pls. XXX–XXXIV.

C Fairly deep form, with plain rim and shorter, more rounded flange, set lower down on wall. Flat base with low moulding at edge and broad groove on underside. Narrow band of rouletting on floor, in some cases reduced to two or three lines in a slight hollow round floor. Granular ware with thick semi-lustrous slip on inside and over flange; exterior often rough. Medium-sized. Common.

D Small, crudely made version of the preceding, with rudimentary flange. Base as Type C; two or three lines of rough rouletting on inside. Ware as Type C, generally of poor quality. Rim D. *c.* 12–15. Fairly common.

For other types of flanged bowls see **28–29** below and Form 92.

Examples:

(Note: the diameters given below are the rim diameter, followed where possible by the diameter over the flange.)

Type A

*1 Univ. of Michigan 20790, from Karanis. D. 19·0/21·8 max.

*2 Abu Mena (Egypt), 65.548. D. *c.* 18·4/22·0. Fragmentary; rim and upper part only. Rather less angular rim and flange. Two grooves on inside; rouletting not preserved. Thin ware.

Type B

*3 Univ. of Michigan 7165, from Karanis. D. 26·2/30·7. Broad band of feather-rouletting round floor.

4–6 Univ. of Michigan 7150, 7151, 7164, from Karanis. D. 26·3–27·9. Similar.

7 Antioch excavations; Waagé (1948) 50, fig. 28.7, pl. X, shape 883m. D. *c.* 24·5/28·2. Similar; flange more rounded, foot as **1**.

8–10 Univ. of Michigan 7131, 20109, 20176, from Karanis. D. 19·8–22·0. As **3**, smaller.

(11 Cimiez; Mouchot (1963) 140, no. 4. D. 20. Perhaps this ware. The published drawing indicates a low-set flange and feather-rouletting round inside of wall. Mouchot classes the vessel as 'sigillée claire B', but it seems hardly to fit there.)

Type B/C

12 Univ. of Michigan 3658, from Karanis; *ILN*, 27 June 1936, p. 1160, on figs. 3, 4. D. 25·2/28·7. Rim as Type B, flange a little narrower; base as Type C with small groove below. Rouletted band rather narrower than on **3**, etc.

13–16 Univ. of Michigan 7130, 7142, 7161, 20036. D. 16·8–19·4. Similar.

17 Tunis, Bardo, from Carthage; *Cat. Alaoui* (1910) 309, no. 644. D. 16·2. Similar; feather-rouletting covers floor. Rather coarse ware, thick bright slip.

Type C

18 St.-Rémy, from St.-Blaise (no. 959); Lamboglia (1963) 189–190, form 24/25. D. *c.* 17·4/20·0. Small crude flange; rim rather low. Band of feather-rouletting round floor.

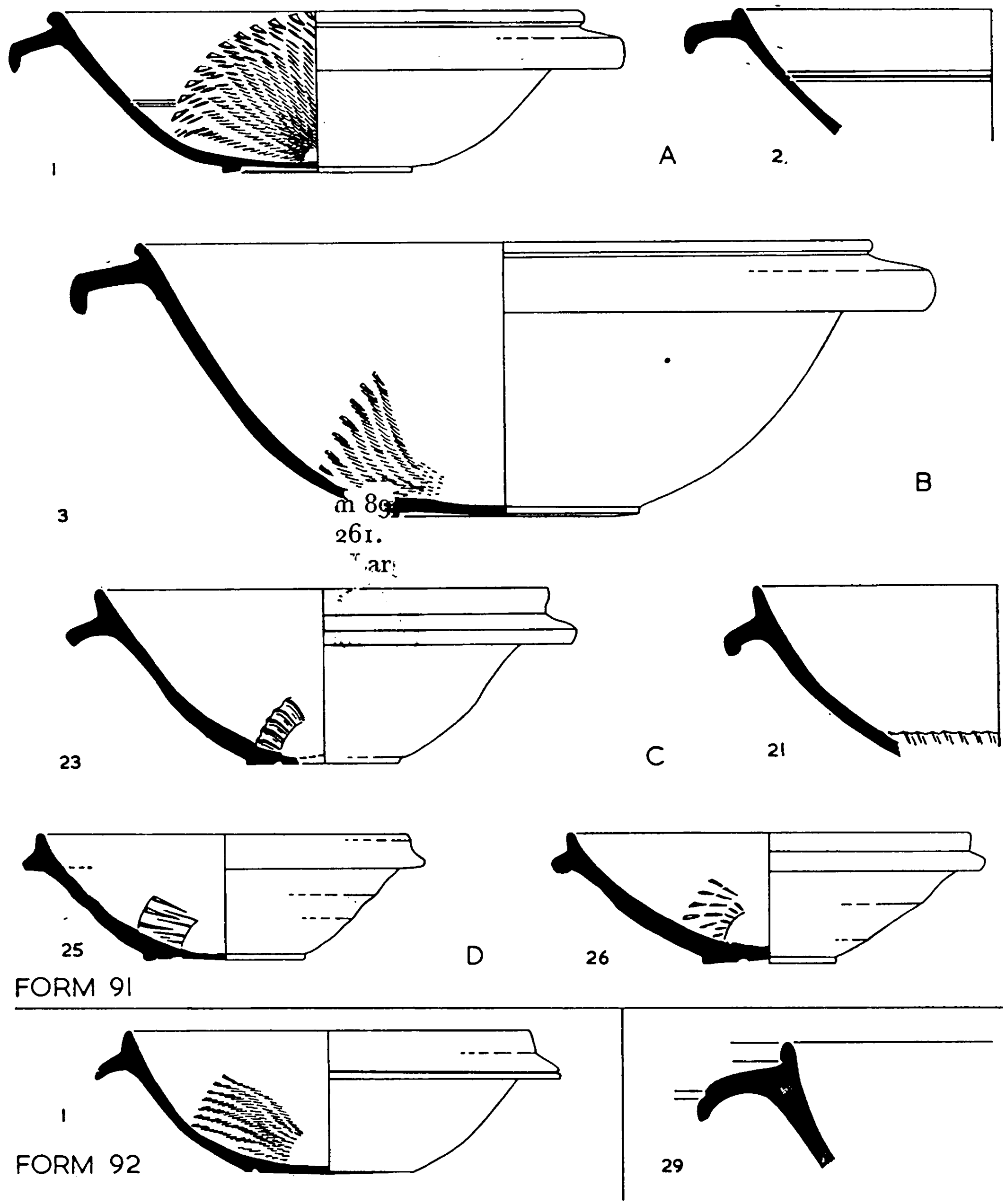


FIG. 26 Scale 2:5

19 Valencia, uncat.; ref. Lamboglia (1963) 190 n. 1. Cited as parallel to **18**; no details given.

20 Antioch excavations; Waagé (1948) pl. X, shape 883p. D. *c.* 16·5/19·5. Low rim, rolled flange. Hollow round floor, presumably containing rouletting.

*21 Apollonia (Cyrenaica), Byzantine Palace. Fr.; est. D. *c.* 17·2. Line of rouletting in hollow preserved at break. Short flange with rolled lip.

22 Ventimiglia; Lamboglia (1950) 143, fig. 80, no. 23; Lamboglia (1963) 191, form 38. D. *c.* 20·6/22·8. Fragmentary. As **21**; floor and rouletting missing.

*23 Corinth C-34-1938/2085. D. 16·2/18·2. Fragmentary. High rim. Single line of rouletting, in hollow band. Short flange with rounded lip.

24 Cosa CG 317 (in American Academy at Rome). Similar to **23** (more rolled flange).

Type D

*25 Apollonia (Cyrenaica), from Byzantine Palace. D. 13·2/14·2. Wall roughly conical, with prominent wheelmarks. Two lines of coarse rouletting round floor, in a small hollow. Poor thin slip.

*26 Tocra (Cyrenaica) 64/101. D. 14·4/15·4. Similar, rather more flaring, with wheel-ridges on outside. Three lines of coarse rouletting round floor. From same site: further examples, similar.

Variant

27 Leiden H III Z 22; Holwerda no. 620, fig. 15, pl. V. D. *c.* 18·4/21. Variant of Type B/C, with flat base without moulding or groove. Short flange with plain lip, set close under rim. Feather-rouletting, on floor only.

Cf. also Form 94.3.

Large variants

28 Tunis, Bardo, from Carthage; *Cat. Alaoui* (1910) 318, no. 746. Est. D. of foot 14; D. at junction with flange est. *c.* 36. Large fr., from base almost to rim; flange and rim broken off. Fine-grained ware with thin smooth slip. Form and decoration related to Type A: low angular foot; floor covered with rouletting; three grooves on upper part of wall. For rims of similar vessels, see Baradez (1961), pl. II.42; Lamboglia, *Riv. st. lig.* xxviii (1962) 286, fig. 16, no. 23. These indicate a rather high vertical rim, possibly bearing a groove on the outside at the lip. A third fr. apparently similar, with the flange preserved, is *Antioch* iv.i 50, pl. X, shape 882. Its flange is broad and flat, with a slight roll at the edge, and two grooves on top at the lip.

*29 Lepcis Magna, Serapeum C 26. Fr.; est. D. 27/33. Similar to Type B, with curved flange, bearing groove on lip.

A fragmentary large example from Saloniki,[1] related to the above, bears combed grooving on the floor; the lustrous slip displays clear burnish-marks.

[1] E. cemetery; for context see p. 327 n. 1.

A clear development can be traced from Types A and B to Type D. The earlier pieces are characterized by a broad flange, generally over 2 cm. in width, bevelled flat on both surfaces, with a hanging lip meeting it at a sharp angle. The rim is low, tending to be slightly knobbed. On later pieces the rim increases in height, and the flange becomes progressively smaller, ending up as little more than a large knob. Examples with rolled or hooked flanges (as **21**) seem to precede those with short flat ones (as **23**). Together with the reduction in size of the flange, the rouletted area on the floor diminishes; the elaborate feather-rouletting of Types A, B becomes reduced to little more than a single line. Pieces with a separate foot are early. A decline in the quality of the fabric accompanies these changes. Whether Type A is the earliest version of the form or merely a contemporary of Type B in finer fabric is not clear, though the latter seems more probable in the light of the available dating-evidence. With its grooves and feather-rouletting, it could be the successor of Form 53B, which it resembles in fabric.

It seems improbable that this form has any real connection with the Gaulish form Drag. 38, despite the similarity in shape. Lamboglia's attempts to link the two depend largely on an unacceptably early dating-system. If any direct predecessor is to be sought, it is possibly to be found in the series of flanged North African mortaria (see below, pp. 303–4).

The chronology of the early types remains rather uncertain, but it seems unlikely that the form appeared much before the middle of the fifth century. It does not appear in the numerous fourth-century deposits in the Athenian Agora; the earliest well-dated piece there is a fr. of Type B (P 27599) from one of the levels of *c.* 460–75 (see above). The form becomes common in the Agora only in the sixth century. The Cistern deposit at Abu Mena (*c.* 480?), contains several frs., mainly of Type A, including **2** above. The Antioch evidence indicates that Type B continued into the early sixth century; it occurs in the earthquake deposit of 526 (see *Antioch* iv.i 57). The majority of the Karanis pieces seem stylistically to belong to this period; some are associated with examples of Forms 93A and 99A. Type C is not attested before the sixth century, when it occurs in a number of Agora deposits; some rims with rolled flanges (as **21**) are present in mid sixth-century contexts. No. **23** appears to be associated with a number of late sixth-century coins, and to form part of the same deposit as Form 99.18. A piece similar to **24** occurs at Corinth in a deposit of *c.* 600 (with Form 99.23 below). Frs. of Type D are common in the latest levels on sites in Cyrenaica, to be dated to the first half of the seventh century; **25–26** are two of the more complete examples found.

There is no direct dating evidence for the large variant types; stylistically, however, they may be considered early. **27** is probably to be classed as a freak variant of Type B/C.

Suggested dates: Type A—mid-late fifth century.
Type B—*c.* 450–530.
Type B/C—early sixth century.
Type C—*c.* 530–600+.
Type D—*c.* 600–650.

FORM 92

Flanged bowl, similar to Form 91, but with short tapering flange. Rather fine-grained brownish ware, with thin smooth slip all over; apparently same ware as Form 68. Rather shallow form. Flat base (with or without moulding), bearing a groove close to edge. The flange is markedly downturned. Fine feather-rouletting covers most of floor.

Rather small-sized; see examples below. Rare outside Tunisia.

Examples:

*1 Copenhagen 8057, from el-Djem; *CVA Copenhague* 7, pl. 310.5. D. 14·3 (max. 16·6). Small groove on flange. Slight 'twig-marks' on underside.

2 Tunis, Bardo, from el-Aouja. D. 15·8. Flange plain. Low base-moulding.

3 Tunis, Bardo (ex Houdart Coll.). D. 15·6. As **2**.

Possibly to be classed here is:

4 Marseille, Musée Borély 7488, from St.-Chamas; Lamboglia (1958) 293, form 24/25. D. *c.* 13·0. Similar form, with more upright rim and a low foot; no decoration indicated.

An undated form. The closest connections seem to be with the earlier varieties of Form 91; the fabric would also seem to indicate an early date. Lamboglia classes **4** among his 'A' ware.

Probable date: about mid fifth century, or earlier.

FORM 93

Antioch 851, 858, 859, 862.

Large bowl with open curving body, flat rim and rather high flaring foot. Rather granular fabric, with slip over inside and rim. Normally a groove on floor, surrounding a single stamped motif at the centre (Style E). Two main types:

A with fairly wide rim, 2 cm. or more across, generally with a thickening at lip. Foot sometimes high and thin. Not all pieces bear stamps. Stamps of Style E (i). Slip sometimes thin and dull, with pimply surfaces (cf. Forms 59–61).

B with shorter rolled rim. Coarser fabric normal with thick slip (as Form 104); heavier foot, sometimes slightly knobbed. Often a groove halfway up outside of wall. Stamps mainly Style E (ii).

Size-range: D. 25–32·5. Common.

Examples:

Type A variant (early?)

1 Lepcis Magna, Serapeum C 23. D. 25·2. Base missing. Broad flat rim, 3·5 cm. wide, hooked at lip. Groove on outside just above missing foot; fine groove round floor. Thinnish pimply ware with thin dull slip. Decoration: stamped rosettes (Type 54) on rim, originally probably six; floor decoration lost.

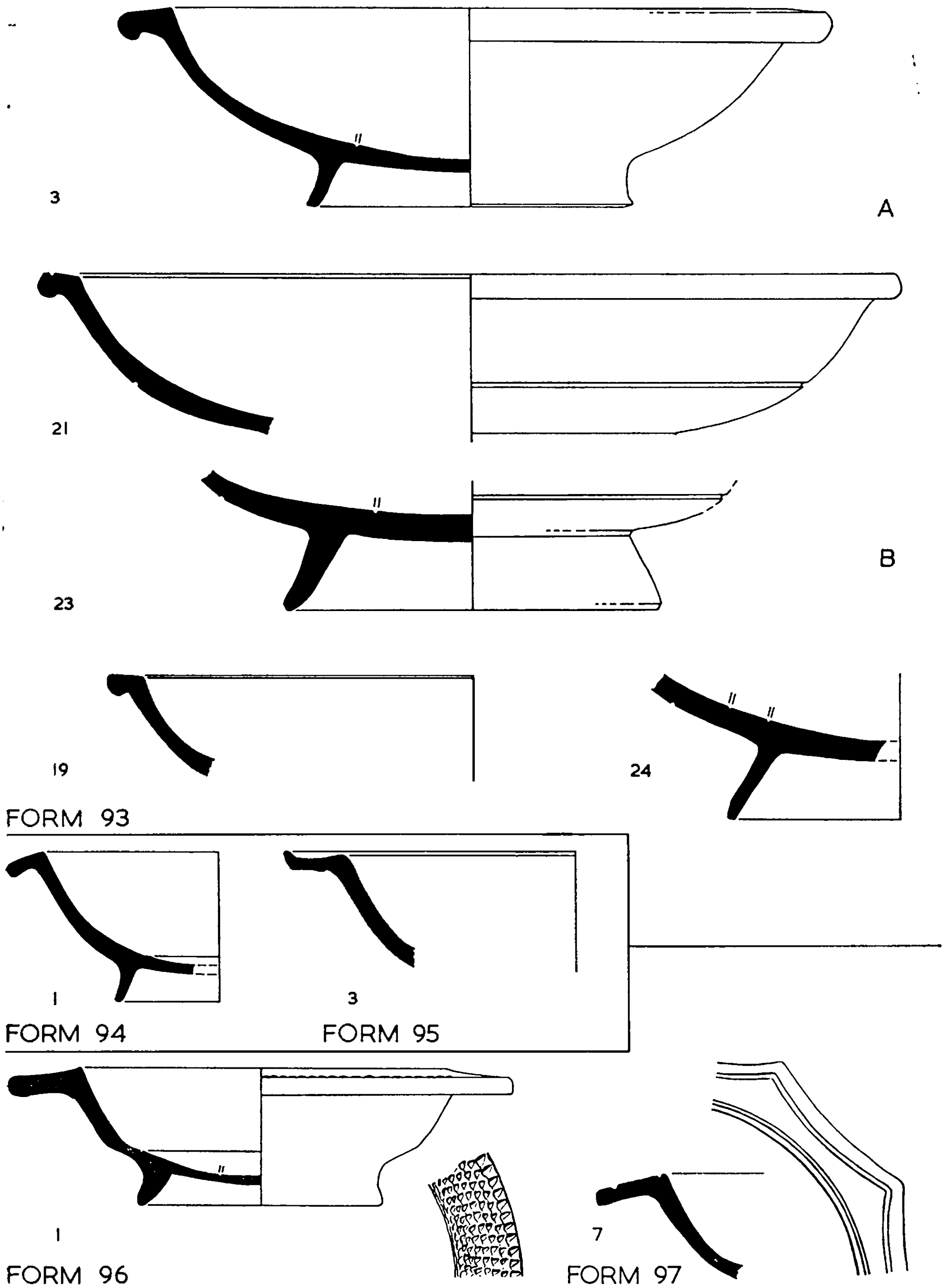


FIG. 27 Scale 2:5

Type A

2 Antioch excavations; Waagé (1948) pl. IX, shape 851a. Est. D. 27·5. Fragmentary. Hooked lip.

*3 Univ. of Michigan 7160, from Karanis. D. 26·8. Rolled rim; high thin foot. Stamp: cross in heart (Type 285).

4–14 Univ. of Michigan 7146, 7147, 7149, 7155, 7156, 7158, 7159, 7162, 20024, 20067, 20110, from Karanis. D. 26·0–*c.* 29·0. Similar, with minor variations; rims generally less rolled, feet rather lower and thicker. Some examples stamped.

15 Antioch excavations; Waagé (1948) 49, pl. IX, shape 858. Est. D. 27. Fragmentary. Similar.

Similar bases

16 Tunis, Bardo, uncat., from Carthage (Dermech, 1903). Est. D. of foot 14·5, H. of foot 2·2. Thin high foot. Rather thin fabric with thin dull slip. Stamp: standing figure, largely obliterated.

17 Tunis, Bardo, uncat. Est. D. of foot 13·6. Similar. Stamp: cow or bull r. (Type 162), damaged.

Type B

18 Univ. of Michigan 7154, from Karanis. D. 27·3. Rim slightly downturned; slightly knobbed foot. One groove on floor, no stamp.

*19 Athens, Agora P 27065. Fr.; est. D. *c.* 27·5. Slightly rising rim.

20 Abu Mena (Egypt) 67.82. Est. D. *c.* 26. Fragmentary; foot broken. Rim as **19**. Two grooves on floor (centre missing).

*21 Athens, Agora P 27177. D. *c.* 32·5. Base missing. Rim as **19**, with groove along lip. Groove on wall.

22 Medinet Madi (Egypt); Bresciani, *Medinet Madi 1966–1967*, 57, no. 91, pl. 68.4. D. *c.* 22·2. One side missing. Stamp: cross with double outline (Type 311).

Similar bases

*23 Carthage, Lavigerie, uncat. D. of foot 14·2. High flaring foot. Heavy ware with thick smooth slip. Groove on wall. Stamp: large cantharus (Type 275), surrounded by groove.

*24 Benaki Mus. Athens, 12463, from Alexandria(?). Fr.; est. D. of foot 13. Similar, with thinner foot. Rough exterior with brush-marks. Stamp: a cupid (Type 227) preserved (one of a pair?). Two grooves round floor. Possibly Form 100.

The development is from a type with a broad rim to one with a short thick rim; the unique piece no. **1** is probably the predecessor of the main series. The foot seems rather variable, but is always high. The external wall-groove should be late, and may be compared with that found on the dishes of Form 104; vessels with this feature share with the dish series the same fabric and stamped decoration. In contrast, many pieces of Type A are related to the earlier stamped wares and to Form 76 in fabric. The form therefore marks the transition to the main sixth-century series, rather like Form 87.

This is predominantly a late fifth- to early sixth-century form. A fr. of Type A

(cat. 65/532) is present in the Cistern group at Abu Mena, while a number of frs. of Type B, including no. **20**, occur in the rather later Kom deposit. These should date from about the third quarter of the fifth century and the late fifth- to early sixth-century respectively. Some pieces of Type B have been found in contexts of the earlier part of the sixth century in the Athenian Agora: **19** from a group of *c.* 520–40 (though the fr. itself may be earlier),[1] and **21** in a level with coins running to Anastasius I (491–518). The evidence from Antioch for the form is not very clear, though frs. of Type B appear to be present in early sixth-century groups. On stylistic grounds, some overlap in production with Form 104 must be admitted.

Suggested dates: c. 470–540 (Type A mostly fifth century, Type B after 500). No. **1** may be rather earlier.

FORM 94

Antioch 853–854.

Bowl. A smaller version of Form 93. Floor marked off from wall by a small offset over foot. Two types, corresponding to those of Form 93:

A with broad downturned rim.

B with short rim, flat on top and rolled on underside. Often a groove on wall.

Size-range: D. *c.* 16–18·5. Uncommon.

Examples:

Type A

*1 American Academy in Rome, from S. Maria in Aracoeli (Capitoline). Est. D. 16·0. Fragmentary. Rather fine ware (cf. that of Form 91B above). Deep-bodied, with high thin foot. Probably no stamp at centre.

Possibly same

2 Ventimiglia, 19904; Lamboglia (1963) 190, form 35. D. *c.* 16·8. Base missing.

Variant

3 Tipasa, Maison des Fresques; Baradez (1961) pl. II.7. Fr.; est. D. *c.* 18. Similar, shallower; rim hooked and bevelled on outside. Feather-rouletting on floor, as on Form 91.

Type B

4 Athens, Agora P 27142. Fr.; est. D. 16·6. Base missing. Shallow; a smaller version of Form 93.19, with slight grooving on outside of wall.

There is no direct dating-evidence for Type A. Some frs. of Type B are present in the Kom deposit at Abu Mena along with Form 93B. One version (Waagé 854) occurs in the earthquake deposit of 526 at Antioch.

Suggested date: late fifth to early sixth century (as Form 93).

[1] Agora Deposit I–J 9:1.

FORM 95

Antioch 875.

Bowl, with curved body, high flaring foot and broad horizontal rim with an upward hook at lip. Floor marked off from wall by a small offset over foot. Grooves on floor, surrounding a single stamped motif at centre (Style E). Cf. the Forms which follow. Uncommon.

Examples:

1 Antioch excavations; Waagé (1948) pl. IX, shape 875f. D. *c.* 20·5. Two grooves on floor. Stamp not indicated.
2 Paris, Coll. Maurice Cavaroc; *Celticum* iii 128, 130, pl. 40, fig. 3. D. *c.* 19(?). Very high foot. Apparently no grooves on floor. Small jewelled cross stamp (Type 318) at centre.
*3 Apollonia (Cyrenaica), Byzantine Palace. Fr.; est. D. 22.

The stamp on **2** suggests an early sixth-century date; the Apollonia piece is unlikely to be any earlier than this, on grounds of findspot and fabric.

Suggested date: first half of sixth century.

FORM 96

Antioch 857.

Bowl, similar to last, but with broad slightly downturned rim covered with rouletting. Body rather shallow, with rather sagging form; curved floor with offset at edge; tapering foot of medium height, with slight outcurve at bottom. Rim slightly concave on top. One groove round edge of floor close to offset; at centre a single stamped motif (Style E) surrounded by another groove. Rather granular clay, with thick lustrous slip on inside and over much of wall; rest self-slipped, often rough, with brush-marks visible.
Size-range: D. 18–24·5. Rather uncommon.

Examples:

*1–2 Benaki Mus., Athens, 12516 and 12517. Matching pair (**1** illustrated). D. *c.* 18·9. Stamp: dotted cross-monogram (Type 289B).
3 Tunis, Bardo, from Oudna (1894–95). Est. D. 18; fragmentary. Misfired. Rather shallow form. No grooves on floor. Stamp: cock r. (Type 194; Gauckler, *BAC*, 1897, pl. IX. 11).
4 Tunis, Bardo, from Carthage (1920 excavations). Est. D. 18·5; fragmentary. Normal; centre missing.
5 Sétif; Février (1963) 132, fig. 10. D. *c.* 18·6. Deep, with steep wall. Stamp not indicated.
6 British Museum, Egyptian Dept. 37413 (=1902.10–11.112), from the Fayoum.[1] D. 17·9. No groove at edge of floor; centre missing.
7 Sebha Mus. (Libya) H 29, from Germa, Royal Tomb 14. D. 20·6. As **1**; stamp missing.

[1] Possibly from Grenfell and Hunt's excavations in 1901–2; see *Egypt Exploration Fund, Archaeological Report 1901–1902*, 3.

Variants

8 Tunis, Bardo, from Oudna (1894–5). Est. D. *c.* 18·0. Most of rim broken. Normal shape, but without rouletting on rim. Notches along lip, groove and notches at inner edge of rim. Stamp: small cross with double outline (Type 321; details not clear). Slight ridge on outside above foot resulting from luting on of foot.

9 Carthage, Lavigerie. D. 21·2. Normal shape, but with stamped decoration on rim in place of rouletting. Rim-decoration: seven fish and seven bushes or branches with leaves (Type 120 var.), alternating (poorly impressed); two grooves along inner edge. At centre, dotted cross-monogram (Type 295A?).

This is one of the forms made by the Oudna workshops; **3** is perhaps to be regarded as a waster, while the odd vessel **8** may be an experimental piece.

Although the stamps on **1–2** are very similar to those on the dated dish Form 84.5, it is unlikely that this form began much before 500. It belongs mainly to the early sixth century, along with most of the other vessel-types manufactured at Oudna. A few pieces are present in sixth-century levels in the Athenian Agora; the form does not occur in the major fifth-century ones.

Suggested dates: c. 490–540.

FORM 97

Antioch 856, Lamboglia 48.

Bowl, as Form 96, but with scalloped instead of rouletted rim. Rim flat or slightly convex, tilted downwards, with edge scalloped to form eight or ten slightly concave sides; one deep groove close to lip, following the scalloping, a second (normal) close to inner edge.

Size-range: D. (max.) 18–23·5. Rather uncommon.

Examples:

1 Tunis, Bardo, from Oudna (1894–5). Max. D. *c.* 21; fragmentary. Probably ten-sided. Grooves round edge of floor and round stamp. Stamp: animal (possibly a frog?), poorly impressed.

2 Same. Max. D. est. *c.* 19. Fragmentary; number of sides uncertain. Badly misfired. Stamp: animal(?); only edge preserved.

3 Carthage, Lavigerie, from Bouar Chott. Max. D. *c.* 18·5. Ten-sided. Stamp: dotted cross-monogram (Type 289B).

4 Athens, Agora P 9656; Robinson, 116, pls. 36, 71, M 349. Max. D. 20·7. Ten-sided. Accidentally burnt; slip varies from streaky reddish orange to an ivory colour. Stamp: swastika (Type 147).

5 Hermopolis Magna (Egypt); Roeder, *Hermopolis 1929–39*, 336, pl. 82c–d. Max. D. 18 (?). Ten-sided. No grooves on rim(?). Stamp: dotted cross-monogram (Type 289B); cf. **3** above.

6 Köln, RGM 29.264, from Godorf; Fremersdorf, 17, fig. 10, pl. 4.10; Ulbert, *Madrider Mitt.* ix (1968) 363, fig. 9. Max. D. 20·8. Eight-sided. Stamp: jewelled cross (Type 327).

*7 Athens, Agora P 163; Waagé (1933) 298, no. 180, fig. 3, pl. IX. Fr.; max. D. est. 20·6. Number of sides uncertain. Similar.

8 Marseille, Musée Borély XXII.6, from Vieux-Port; Lamboglia (1963) 194. D. *c.* 17·5; fragmentary. Similar; two grooves along inner edge of rim.

9 Córdoba, Mus. Arq. D 25/5, from El Germo; Ulbert, *Madr. Mitt.* ix (1968) 362–3, fig. 10, pl. 140 b. Max. D. 20. Eight-sided. Two grooves along inner edge of rim. Stamp: cross (Type 312 variant).

10 Ceuta Mus. (Morocco); *ibid.* 363, pl. 145 a. D. not stated. Ten-sided. Stamp missing.

11 Antioch excavations; Waagé (1948) pl. IX, shape 856k. D. *c.* 19·0. Shallow, with abnormally low foot. Two grooves on floor, none at offset. Groove along inner edge of rim only. Stamp not indicated.

Another of the forms produced at Oudna; see **1–2**. The Agora piece **4** has a stamp identical to ones found at Oudna (Gauckler, *BAC*, 1897, pl. VIII. 6). The stamps on **3** and **5** are the same as those on Form 96.1–2.

Another early sixth-century form, closely related to Form 96. The two Agora speciments **4** and **7** both come from early sixth-century contexts. The form is stated to have been common at Antioch, where it first appears in the earthquake deposit of 526. The stamp on **6** (of Style E (ii)) indicates a date rather late in the series. No. **11** should also be late; its low foot is of a type more characteristic of Form 99. These late pieces suggest that the form lasted rather longer than Form 96.

Suggested dates: c. 490–550.

FORM 98

Lamboglia 24.

Shallow bowl with broad floor, almost flat, low curved wall and short flat rim; foot of medium height under edge of floor. Related to Forms 94B and 99A. I distinguish two types:

A of medium size, with floor decorated as on Forms 96–97; small offset over foot. Flaring tapering foot, meeting wall at an angle (cf. Form 99A). One example only.

B small, with no offset or grooves on floor. Single stamp at centre.

For a later version, see Form 108.
Sizes as examples below. Rare.

Examples:

Type A

1 Tunis, Bardo, from Carthage (1920 excavations). D. 18·8. Slip down to just above foot, with prominent polishing-marks on rim. Stamp: cross with double outline (Type 310).

Type B

2 St.-Rémy, from St.-Blaise (no. 958); Lamboglia (1963) 189. D. *c.* 13·6. Stamp: palmette (Type 118).

3 Ventimiglia (1958 excavations, no. 270); Lamboglia (1963) 188–9. D. *c.* 13·4. No stamp indicated.

Perhaps Type A:

4 Sortino plateau, Sicily, from 'Lardia' cemetery; *Rivista di arch. crist.* xxxix (1963) 126–7, fig. 14. Similar size? Stamped dotted cross-monogram (Type 289B) at centre, surrounded by two grooves. Two grooves round edge of floor.

No. **1** is closely related to Form 93B and early pieces of Form 99, on which its stamp can also be paralleled. The stamp on **2** is of a type which was used at Oudna (cf. Gauckler, *BAC*, 1897, pl. VIII.12). **4**, if it is of this form, indicates an early start (cf. Forms 96–97).

Probable date: early sixth century.

FORM 99

Antioch 878, Lamboglia 1.

Bowl, of almost hemispherical shape, with heavy rolled rim and flaring tapering foot, generally rather low. Sloping floor with offset at edge, as on Forms 96–97, bearing a central stamp (Style E) and/or grooves.

Three types:

A broad-based, with diameter of foot well over half that of rim. Foot of medium height, fairly thin, close to that of Forms 96–97. Steep wall, with large heavy rim. Decoration of floor similar to that of Forms 96–97: stamp at centre, surrounded by groove, a second groove round edge of floor.

B with base of reduced size (D. not more than half that of rim), and more flaring wall. Foot low and heavy, more or less triangular. Rim rather smaller. Stamped motif at centre of floor, sometimes with grooves as on Type A. Tendency to a coarser fabric with rough exterior bearing brush-marks. Antioch 878f.

C as Type B, with low foot and small rim; two grooves on floor, no stamp.

Size-range: D. 14·5–21, regularly 17–20. Common.

Examples:

(Diameters are measured at lip.)

Type A

*1 Louvre MNB 3194, from Cherchel. D. (max.) 17·5. Rather fine ware, with thick slip on inside, thin smooth slip on outside. Heavy knobbed rim. Stamp: cross-monogram with double outline (Type 308). No groove round stamp.

2 Tunis, Bardo (possibly from Carthage). D. *c.* 17·5. Normal rim, floor almost flat. Stamp: cantharus (Type 272).

3 Tunis, Bardo, from Carthage (Dermech, 1901). Est. D. 17·5. Fragmentary. Stamp: cross with double outline (Type 311); part missing.

4 Carthage, Lavigerie. D. 15·4. Stamp: cross with double outline (Type 311).

5 Univ. of Michigan 7145, from Karanis; *Early Christian and Byzantine Art* (Walters Art Gallery, Baltimore, 1947) 126, no. 641. D. 19·1. Stamp: cross with double outline (Type 311).

6 Ventimiglia; Lamboglia (1950) 143, fig. 80.18. D. *c.* 17·5. No grooves indicated on profile. Stamp: palmette (Type 118).

*7 Lechaion, Greece, early Christian basilica (1959). D. 19·0. Rather fine ware. Form tending to Type B. Stamp: zigzags and linked circles (Type 146).

*8 Sami, Greece, Roman Baths. Est. D. *c.* 18·5. Fragmentary. Shallow form. Two grooves round edge of floor; centre missing.

9 Mainz RGZM O 22690, from Carthage. Est. D. *c.* 14·8. Fragmentary. Form as **8**. One groove round floor; centre missing.

10 Cosa CG 475. Fragmentary. Similar.

(11 Pianopoli (S. Italy); *Fasti Arch.* ix (1954) 540, ref. 7666, fig. 154. Possibly Form 98; no details published. Stamp: cross (Type 311?).)

*12 Louisville, Kentucky, Southern Baptist Theological Seminary, no. 896. D. 14·5. Tending to Type B, with heavy triangular foot. Stamp: almond-shaped motif, dotted (Type 133). Graffiti: four fish on outer part of floor.

Type B

*13 Athens, Agora P 19527. Est. D. 19·6. Fragmentary. Heavy rim, heavy foot; grooves as on Type A. Stamp: bird (Type 202).

14 Tunis, Bardo, from Oudna (1894–5). D. 18·6. Similar, with rough exterior. Stamp: 'ivy-leaf' (Type 112; Gauckler, *BAC*, 1897, pl. IX.4).

15 Ventimiglia; Lamboglia (1941) 22; *id.* (1950) 143, fig. 80.17; *id.* (1963) 184–5. D. *c.* 19·8. Similar; no grooves indicated on profile. Stamp: bird (type uncertain).

16 Univ. of Michigan 7148, from Karanis. D. 18·2. Similar; knobbed foot. Stamp: small jewelled cross (Type 316).

17 Berlin, from Akhmim (Egypt); Wulff (1909) 293, pl. LXXII, no. 1556. D. 19·5. Apparently as **13**. Stamp: bird (Type 202).

*18 Corinth C-34-1839. D. 18·8. Small rim, low foot. No grooves on floor. Stamp: bird (Type 207).

19 Tunis, Bardo, from Oudna (1894–5). D. 17·8. As **18**. Stamp: 'ivy-leaf' (Type 112), as on **14**, impressed twice (restamped).

20 Same. Est. D. 19. Fragmentary. As **18**. Stamp: Greek cross (Type 316), poorly impressed.

21 Kenchreai (Greece), P 207. As **18**. Traces of poorly impressed stamp at centre.

Type C

*22 Athens, Agora P 14882. D. 19·2.

*23 Corinth, C–56–15. D. 19·0.

24 Delphi, uncat. Est. D. 18·8. Fragmentary.

25 Antioch excavations; Waagé (1948) pl. X, shape 878k. D. *c.* 18·0. Similar form; no grooves on floor.

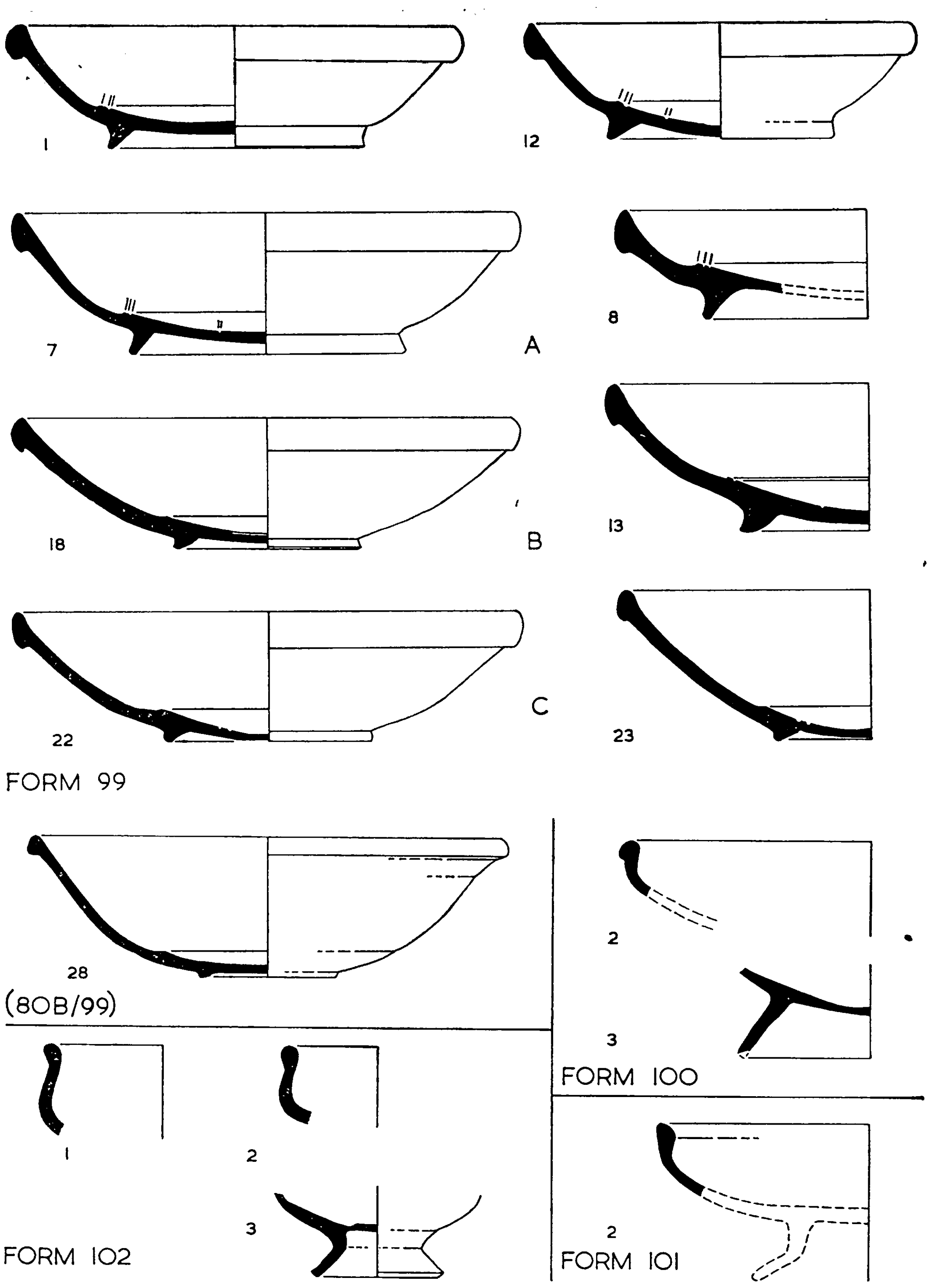


FIG. 28 Scale 2:5

26 Tolmeita (Cyrenaica), uncat. D. 18·1. No grooves or stamp.

27 Auja Hafir; *Nessana* i pl. XLVIII, shape 11. D. *c.* 18·0. Undecorated.

Variant, perhaps early

*28 Delos B 1008/5964. D. (max.) 18·4. Shape similar to Type C, but with steeper wall. Low bevelled foot of small diameter; underside and lower part of wall bear turning-marks; rest less smooth. Offset at edge of floor; no grooves. Thick slightly lustrous slip on inside and rim only. Cf. Form 80B.

Type B occurs in the repertoire of the Oudna workshops, along with Forms 97–98; see **14**, **19**, **20**. Some vessels of Type A may also have been made there, to judge by the stamps used on them (e.g. on **6**). Type A bears stamped decoration similar to that on Forms 96–97; this, and the similar treatment of the foot and of the floor, indicates that it is contemporary with them. However, it may not have begun so early, since certain stamp types (such as the dotted cross-monogram) do not appear on it. The stamp on Type B (mainly birds) belong to a later phase, stylistically related to those on the dishes of Form 104. A third stage of development is represented in the undecorated Type C.

This is the most long-lived of the sixth-century series of small bowls; it survives into the early years of the seventh century. As indicated above, Type A probably appeared soon after Forms 96–97, in the early years of the sixth century. Examples are present in the earthquake deposit of 526 at Antioch, and in the building fills of the church of St. Polyeuktos at Istanbul (*c.* 526–7). No. **5** was found together with an example of Form 91B/C. At Abu Mena and the Athenian Agora frs. of the form occur in early sixth-century deposits, but not in those of the later fifth century. In the middle and later years of the sixth century it ousts the other bowl-types and becomes common. Type B appears before the middle of the century; a piece similar to **13**, with an identical stamp (Athens, Agora P 19640) is present in a group of *c.* 525–50.[1] A second large fr. of similar type (P 4138) appears in another Agora group of the middle of the century. The Corinth bowl **18** was found in loose association with some late sixth-century coins; it may, however, be rather earlier.

Type C is not in evidence in the Agora deposits until the end of the century. **22** was found together with late sixth- to early seventh-century material; **23** comes from a group of *c.* 600.[2] At Antioch pieces which appear to be of this type (Waagé's shapes 878k–p) are present in the deposits of the early seventh century; **26** may also be of this period.

Suggested dates: Type A—*c.* 510–540.
Type B—*c.* 530–580.
Type C—*c.* 560/580–620.

[1] With associated coins to Anastasius I and possibly later.
[2] Dated by a coin of Justin II (565–78).

FORM 100

Antioch 879.

Bowl with sloping floor, low vertical wall with rolled rim, and high conical foot. Probably a development of Form 93; no offset on inside. Fabric similar. Rare; no complete examples.

Examples:

1 Antioch excavations; Waagé (1948) 50, pl. X, shape 879. D. (max.) *c.* 21·2. Fragmentary. Two separated grooves round floor; centre missing.

*2 Tocra (Cyrenaica), uncat., from 1964 excavations. Rim fr.; est. D. (max.) 19·2. Similar.

*3 Same (1965). Base, as **1**. D. of foot est. 10 (tip broken off). Floor undecorated. Slip covers exterior almost to bottom of foot.

The high foot listed as Form 93.23 may belong to a vessel of this form. The three pieces listed were all found together with early–mid seventh-century material.

Probable date: late sixth to early seventh century.

FORM 101

Footed dish, with shallow floor, low wall and high stemmed foot, flaring outwards at base. Ware as Forms 99–100, with thick bright slip on inside and upper part of exterior; rest of exterior rough, with brush-marks.
Rare; only one complete example.

Examples:

1 Tunis, Bardo, from Carthage. D. 15·4. Low sloping wall with plain rim. Undecorated.

*2 Tocra (Cyrenaica), uncat., from 1964 excavations. Rim fr.; est. D. *c.* 16·2. Vertical rim, thickened on inside. Probably same form as **1**; profile restored accordingly.

3 Tunis, Bardo, from Carthage (1920 excavations). Base, fragmentary; est. D. of foot 9. Slip covers exterior to halfway down foot; brush-marks on underside. Foot as **1**. Stamped cross (Type 312) at centre, surrounded by groove.

No. **2** comes from a level of the first half of the seventh century, together with one or two sherds of similar form. The fr. **3**, with its stamped decoration, is probably earlier.

Probable date: mid–late sixth century.

FORM 102

Small bowl with slightly incurved wall with small thickened or outcurved rim. No complete examples; base probably high and flaring, a scaled-down version of those of Forms 100–101. Undecorated.
Size-range: D. *c.* 7·5–9·0. Rare.

Examples:

*1 Tocra (Cyrenaica), from 1965 excavations. Rim fr.; est. D. 9. Outcurved rim.
*2 Apollonia (Cyrenaica), Byzantine Palace. Rim fr.; est. D. 7·4. Thickened rim.
*3 Istanbul, Saraçhane, uncat. Base; D. of foot 5·1. Probably from a vessel as **1–2**. High foot, slightly stemmed, flaring at bottom (cf. Form 101); sloping floor, flat and slightly raised at centre. Undecorated. Slip covers most of exterior wall.

Probably a small counterpart of Forms 100–101; a few frs. (including **1**) occurred at Tocra in the same contexts. The small dimensions of **3** make it fairly certain that it belongs to this form; the piece is unique.

The fr. *Antioch* iv.i pl. X shape 885, with a flanged rim, may be a variant of this form, corresponding to the large bowls of Form 110 (but cf. also Form 12 above).

Probable date: late sixth to early seventh century.

FORM 103

Antioch 877, Lamboglia 60.

Large dish/bowl, with broad shallow floor, straight sloping wall and hooked or rolled rim. Foot of fairly large diameter, varying in height. Floor slightly offset from wall. Cf. Forms 84, 86. Stamped decoration (Style E) and grooves on floor; generally a further groove round edge of floor close to offset (as on the bowls of Forms 96–99); occasionally a groove on wall. Thick granular ware, with thick smooth semi-lustrous slip covering inside and rim. Exterior self-slipped or plain and rough, with brush-marks visible.

Two types distinguished:

A with steep wall and large hooked rim, bevelled flat on exterior; foot fairly high. Antioch 877. Stamps: Style E (i)–(ii).
B with more flaring wall and heavy rolled rim; low thick foot. Stamps: Style E (ii).

Size-range: D. 26–35·5. Rather uncommon.

Examples:

Type A
*1 Louvre MNB 3192, from Cherchel. D. 35·4/36·2 (max.). Discoloured by fire; surface ranges from orange to olive-green in colour. High thin foot. Three pairs of grooves and two bands of crude rouletting round

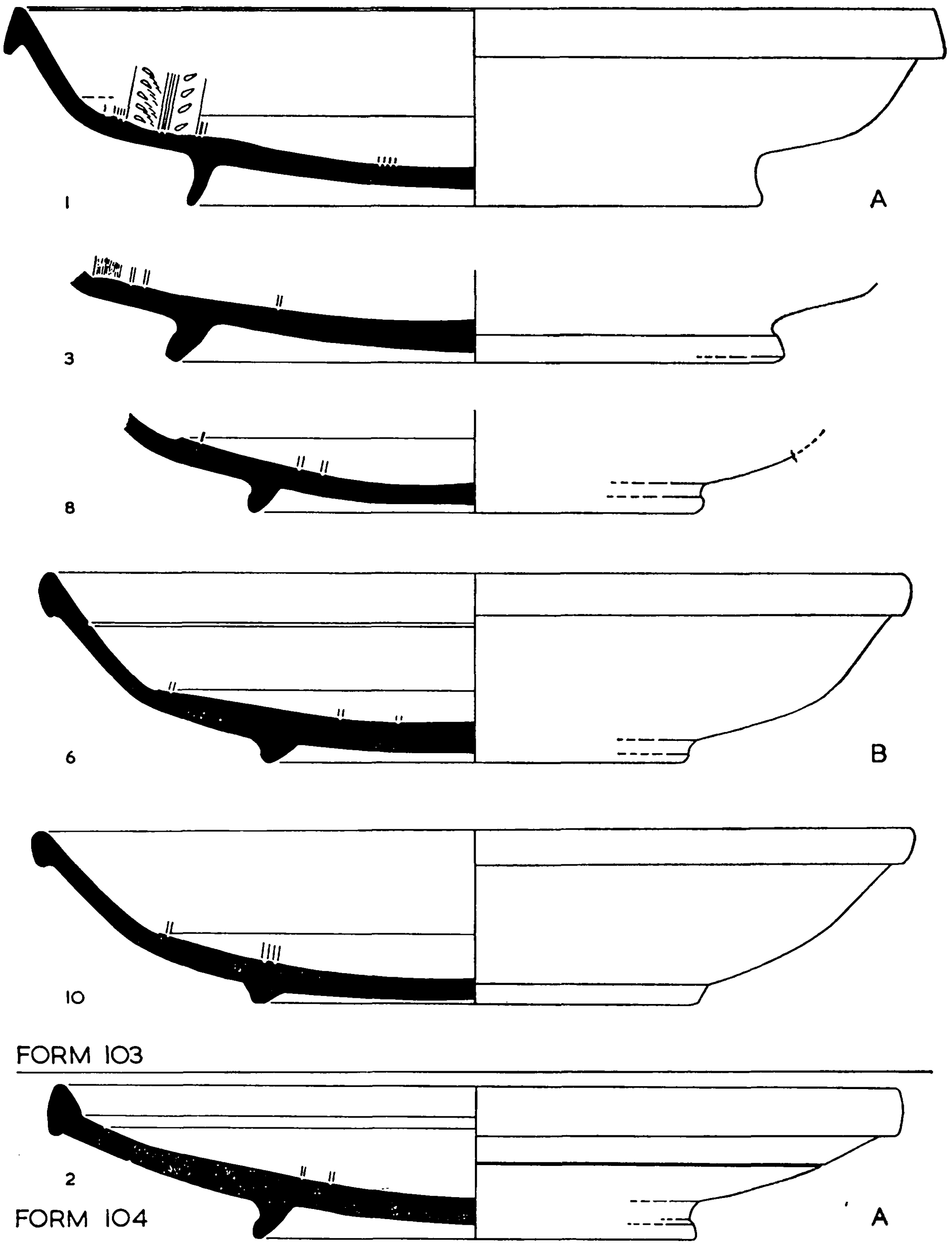


FIG. 29 Scale 2 : 5

edge of floor. At centre, three stamped birds (Type 196), one above the other, surrounded by four grooves.

2 Marseille, Musée Borély 3046; Lamboglia (1963) 205–6, under Form 60. D. *c.* 25·2/26·0. Similar form, but with lower foot. Broad groove halfway up wall. No stamped decoration indicated on published profile; one groove on floor, a second at edge of floor.

*3 Louvre MNB 3193, from Cherchel. Base only; D. of foot 23·8. Apparently similar, with fairly steep wall. Foot of medium height, slightly knobbed. Slightly convex band with polishing-marks round edge of floor, surrounding two grooves. Decoration: central jewelled cross (Type 331A) flanked by three lambs (Type 172) surrounded by a groove.

4 Louvre MNB 3191, from Cherchel. Base only, fragmentary; est. D. of foot 20. Accidentally burnt; surface yellow-ochre on inside, lemon-yellow on rough exterior. Similar to **3**, with polished band round edge of floor. Decoration: three crosses (Type 325), side by side, surrounded by two grooves (about 1 cm. apart).

Type A/B

5 Marseille, from wreck at Carro (Baie de Marseille); *Gallia* xx (1962) 152, figs. 8–9; Baradez (1967) 262, fig. on p. 263, 3 (*sic*). D. *c.* 31·8/33·2. Hooked rim and thinnish foot (as Type A); rather rounded wall; offset at edge of floor (as Type B). Decoration: 'saint' (Type 236?) at centre, flanked by two frontal busts (Type 246A), surrounded by one or more grooves.

Type B

*6 Univ. of Michigan 7167, from Karanis. D. (max.) 33·4. Groove on inside of wall. Decoration: lamb (Type 171) at centre, surrounded by two separated grooves.

7 Univ. of Michigan 7168, from Karanis. D. 32·3. Rather more carinated form than **6**, with foot as **10**. Very worn; decoration effaced.

*8 Benaki Mus., Athens, 12434, from Alexandria(?). Base only; D. of foot 17·5. Curved body-profile; foot slightly knobbed. Decoration: jewelled cross (Type 331B) at centre, flanked by two birds l. (Type 210), surrounded by two grooves.

9 Recklinghausen (Ikonenmuseum) from Egypt; *Ars Antiqua* (*Luzern*) *Auktion II* (14 Mai 1960) no. 40, pl. 19; K. Wessel, *Koptische Kunst* (Recklinghausen, 1963) 168–9, fig. 94. D. 32·5. Decoration: central 'saint' (Type 235), flanked by two running hares (Type 154); above, three volute-motifs (Type 102/103 variant); surrounded by two separate grooves (as on **8**).

*10 Delos B 1094/7808. D. 33·9. Shallow curved form, with rather small rim. Decoration: two 'saints' (Type 234), side by side, with a bird (Type 205) above each, surrounded by two grooves.

The evidence for the date of this form is almost entirely stylistic. Type B (together with no. **5**) is related to the earlier examples of Form 104 in its decorative schemes;

Type A, with stamps mainly of Style E (i) (**3** is an exception) should be earlier, more or less a contemporary of the bowls Forms 96–97. The form is perhaps to be regarded as a derivative of Form 84 in a coarser fabric. No. **7** was found together with examples of Form 91B and Form 93A. The stamps used on **8** suggest a date after 550.

Suggested dates: c. 500 to third quarter sixth century. **1** may be late fifth century.

FORM 104

Antioch 803–805.

Large dish/bowl, with sloping or curved floor terminating in heavy knobbed rim. Foot of varying height. Ware as Form 103, usually rather thick. Normally a groove on inside close to rim; stamped decoration (Style E (ii)) on floor, surrounded by two or three grooves; a groove on outside about halfway between rim and foot.

Two main types:

A dish with shallow sloping floor, slightly curved. Rim vertical, rising well above floor, and tending to come to a point at top and bottom. Foot of medium height, flaring and tapering, often with a slight knob at bottom. Antioch 803, 804a, etc.

B dish, slightly deeper, with more sloping floor. Rim knobbed, with less upward projection. Low angular foot. Ware mostly heavier and coarser. Antioch 805k.

In addition to these, a bowl-shaped version may be classed as Type C:

C shallow bowl with curved floor and rounded knobbed rim; body often slightly recurved below rim. Low foot, triangular or square-cut, of relatively small diameter.[1] No external groove. Normal decorative scheme on inside; the later examples appear not to be stamped. Antioch 805p–u.

Size-range: D. 29–50·5 (mostly *c.* 32–45). Type C: D. *c.* 26–35.
Types A–B very common, Type C rather uncommon.

Examples:

Variant type (early)

1 Sperlonga, Mus. Arch., under inv. no. 44; G. Iacopi, *L'antro di Tiberio a Sperlonga* (Rome, 1963) 157–8, figs. 157–158; *id., L'antro di Tiberio e il museo archeologico nazionale di Sperlonga* (Itinerari dei musei, gallerie e monumenti d'Italia, no. 107, Rome 1965) fig. 62; Baradez (1967) 264–5. D. (max.) 44·1, H. 7·5. Heavy rolled rim, only slightly marked off from floor on inside (cf. rims of early pieces of Form 99); floor curves upwards to rim; otherwise as Type A. Groove on inside close to rim; no external groove indicated on published profile. Decoration: central 'saint' (Type 233), flanked by two fish l. (Type 176) pointing upwards, with four rosettes (Type 55) in field above; surrounded by a single groove.

[1] The foot diameter of Types A–B is on average about half that of the rim; that of Type C is about a third.

Type A

*2 British Museum (Br. and Med.) 1928.4–13.10, from Egypt. D. 32·3/32·8 (max.). Slightly knobbed foot. Decoration: jewelled cross (Type 330) at centre, surrounded by two grooves. PLATE XVIII *b*.

*3 Mainz, RGZM O 13849 (formerly in a Paris coll.). D. 39·0/39·8. Foot as **1**. Decoration: two standing figures with downturned spears (Type 228), side by side, with a bird r. (Type 209A) above each, surrounded by triple groove. PLATE XVII *a*.

4 Mainz, RGZM O 9086, from Egypt. Est. D. *c*. 35·5. Fragmentary. Similar (groove on outside close to rim). Decoration: central standing figure with downturned spear (Type 228), identical to those on **3**, surrounded by seven rosettes (Type 58); triple groove border. PLATE XVII *b*.

5 Tipasa, 'nouveaux thermes de l'Est'; Baradez (1967) 232–234, no. 1, with text figs. pp. 232, 251. D. 50·0. Similar. Decoration: central standing figure with Phrygian cap, in *orans* position (Type 231), flanked by jewelled crosses (Type 326) and five birds l. and r. (Type 206); border of two grooves flanking a recessed convex band (?).

6 Tipasa, 'thermes de la fabrique du garum' (1962); *ibid.* 234–5, no. 2, text figs. pp. 233, 251. D. 50·5. Similar (no exterior groove indicated on profile). Decoration: central standing figure as on **5** (Type 231), flanked by jewelled crosses (Type 331A), with three birds l. and r. (Type 206 or 208) above each; triple groove (?) border.

7 Tipasa, findspot as **6**; *ibid.* 236–8, no. 4, text figs. pp. 237, 251. D. 44·8. High foot; no subsidiary grooves indicated on profile. Decoration: cross-monogram (Type 303) at centre, surrounded by three birds l. and r. (Type 195); triple groove (?) border.

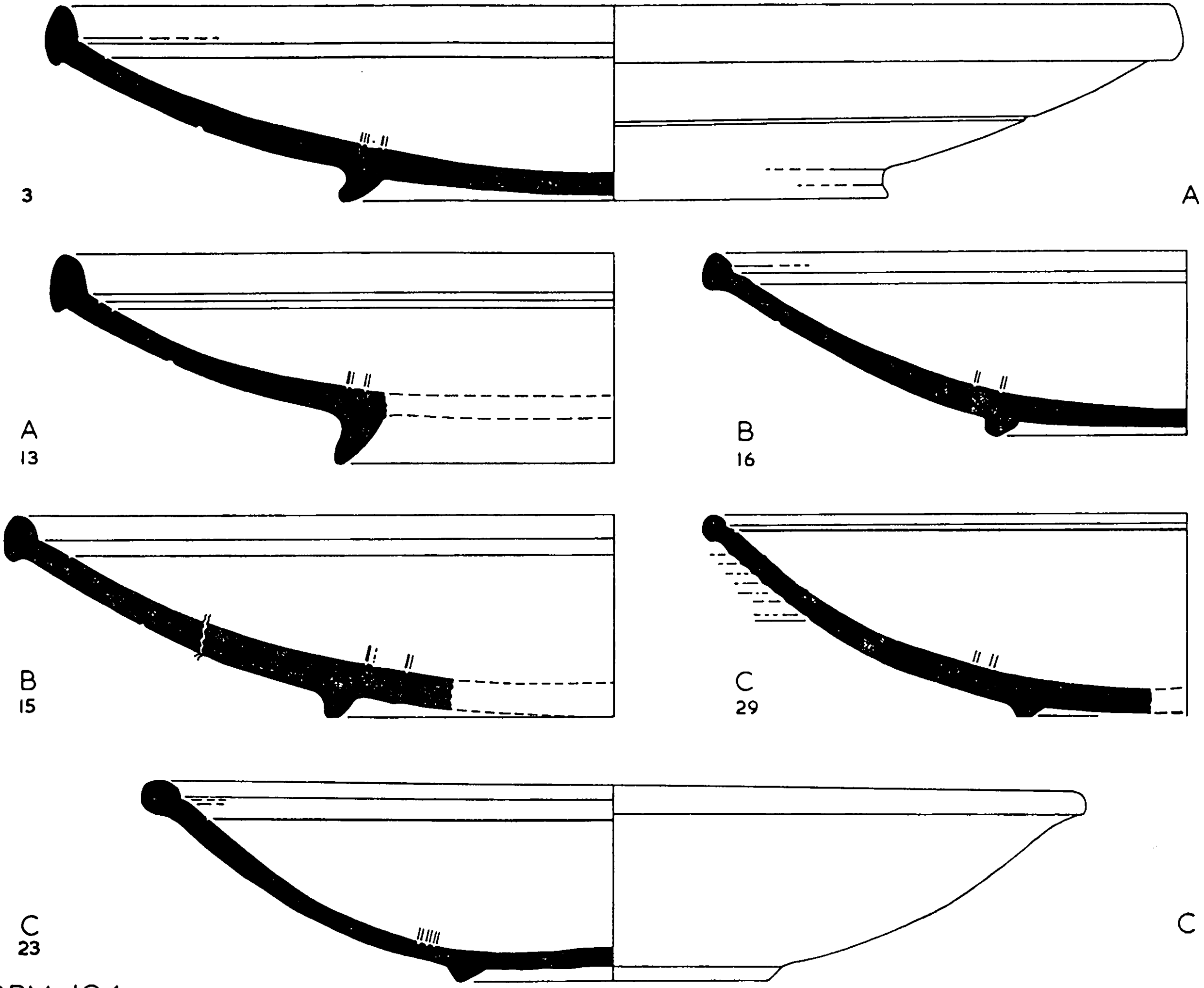
8 Gonnesa (Sardinia); De Rossi, *Bull. di arch. crist.* 2 ser., iv (1873) 125, pl. X, 2; Garrucci (1880) pl. 466.3; Leclercq (1907) ii 537, fig. 356; *DACL* xiv 1185, fig. 10348; Baradez (1967) 237–8. Probably this form. D. of decorated zone *c*. 12·4 (according to indicated scale); rim D. about three times as large.[1] Decoration near-duplicate of **7**; cross-monogram (Type 303), surrounded by three birds (Type 195); triple groove border.

9 Tipasa, findspot as **6**, Baradez (1967) 238, 240, no. 5, text figs. pp. 239, 255. D. 41·0. Rather small decorated zone (D. *c*. 12·8). Decoration (fragmentary): Christ and blind man (?); see Type 242.

10 Carthage, Lavigerie. Est. D. *c*. 35·5. Fragmentary. Decoration: small jewelled cross (Type 321 variant) at centre, surrounded by lambs r. (Type 172; numbers uncertain); triple groove border.

11 Lechaion (Greece), early Christian basilica (1960). D. *c*. 38·0. Knobbed foot. Decoration: large central jewelled cross (Type 335), surrounded by three birds l. and r. (Type 208?); border of two grooves.

[1] De Rossi, *loc. cit.*: 'Un piatto di grandi dimensioni . . . i labbri laterali sono larghi tre volti il diametro del cerchio di mezzo.'



FORM 104

FIG. 30 Scale 2 : 5

12 Tipasa, from old excavations; Gauckler, *MEFR* xiv (1894) 448, fig. 61; Leclercq (1907) ii 530–1, fig. 358; *DACL* xiv 1175, fig. 10336; Baradez (1967) 246–249, no. 24, text figs. pp. 247, 255 (new drawings). D. 39. Two 'saints' (Type 237), side by side, surrounded by triple groove(?).

*13 Athens, Agora P 27069. Est. D. *c.* 38·5/39·4. Fragmentary. Two grooves on inside below rim. Tapering foot. Triple groove round floor; stamped decoration missing.

Type A or B

14 Iasos; D. Levi, *Annuario sc. Atene* xxxix–xl (1961–2) 553–4, fig. 80. D. 39·5. Decoration: central standing figure (type uncertain), flanked by four heads (Type 259), surrounded by two grooves.

Type B

*15 Athens, Agora P 2912. Est. D. (max.) *c.* 42·6. Fragmentary; profile restored from two frs. Thick coarse fabric, discoloured by fire. Decoration: two crude female heads (Type 253B) preserved, flanking a missing central motif; debased triple groove border.

*16 London, Victoria and Albert Museum 476–1891, from Karanis. Est. D. (max.) 34·0. Fragmentary. Decoration: large jewelled cross (Type 336) at centre, surrounded by two grooves. PLATE XIX*b*.

17 Univ. of Michigan 7177, from Karanis. Max. D. 38·6. Similar; foot as **15**. Decoration: at centre Bacchus on panther(?) (Type 226; poorly preserved), surrounded by two grooves.

18 Univ. of Michigan 3431, from Karanis. Max. D. 34·9. Similar. Decoration: large jewelled cross-monogram[1] at centre, flanked by two jewelled crosses.

19 Univ. of Michigan 20977, from Karanis. Max. D. 36·0, D. of foot 12·9. Foot tending to Type C. Decoration: large jewelled cross (Type 333) at centre, surrounded by two grooves.

20 Medeon (Greece), French excavations ME SV 1160. Est. D. 33; fragmentary. Decoration: large jewelled cross (Type 323 variant) at centre, surrounded by two grooves.

Variants

21 Athens, excavations S. of Akropolis (1961) NAK–443. Est. D. *c.* 43; fragmentary. Low heavy foot. Centre of floor flat; outer part developing into a shallow flaring wall of slightly concave profile. No groove on exterior. Decoration: large jewelled cross (Type 333) at centre, flanked by two birds (Type 209 or 210); border of two grooves, marking transition from floor to wall.

*22 Emporio, Chios, from Byzantine fort. D. 35. Fragmentary. Type as **21**; no stamps. Cf. Form 105.

Type C

*23 Lechaion (Greece), from early Christian basilica (1960). Max. D. 33·0. Low triangular foot. Decoration: two Bacchus-figures (Type 223C) side by side, surrounded by three grooves.

[1] With A and ω pendants, and R-shaped *rho*. Unclassified.

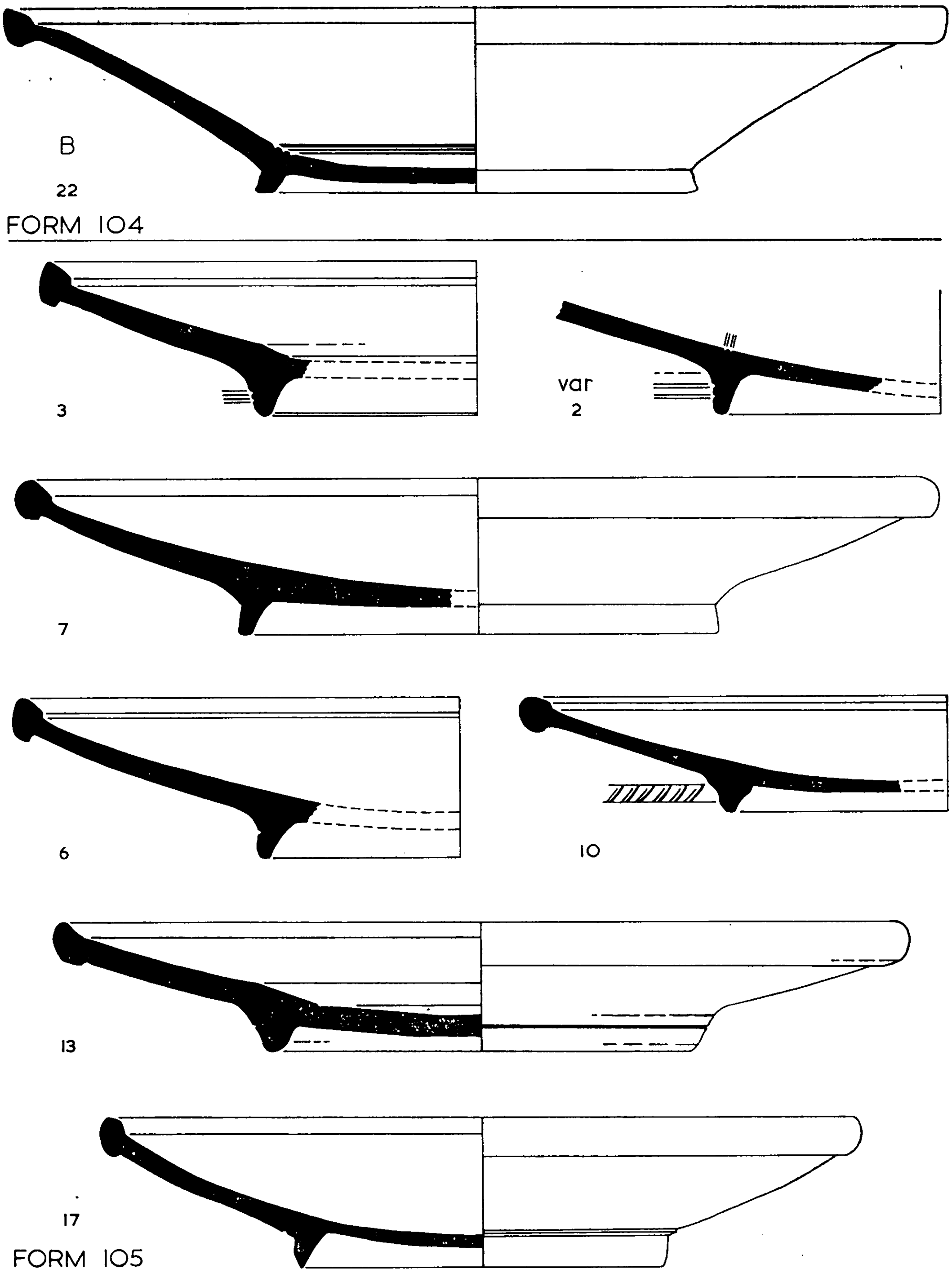


FIG. 31 Scale 2:5

24 Kenchreai (Greece) P 326. D. *c.* 34. Scheme and stamps as **23**.
25 Antioch excavations; Waagé (1948) 48, fig. 31 top, pl. VIII, shape 805u. D. 35. Decoration: central standing figure ('emperor', Type 230C), flanked by two birds (Type 209B), surrounded by three grooves.
26 Beit Shean (Palestine); Fitzgerald, *Beth-Shan* iii 38, pl. XXXIV, 47. D. *c.* 27·5. Decoration: central lion (Type 159), surrounded by three grooves.
27 Khirbat al-Karak; Delougaz (1960) pl. 54.3. Max. D. *c.* 26·2. Form as **25**, deeper. 'Leaf design stamped on bottom inside' (not illustrated; cf. *Antioch* iv.i fig. 30.8), surrounded by two grooves. Delougaz pl. 33.1 could be a second piece of similar type (unstamped).
28 Tabgha, Palestine; Schneider, *Die Brotvermehrungskirche* 30 (English ed. p. 32) fig. 17.[1] D. *c.* 28; fragmentary.[2] Similar. Centre missing, no stamps preserved.
*29 Apollonia (Cyrenaica), Byzantine Palace. Est. D. *c.* 33·8; fragmentary. Low angular foot; small knobbed rim. Two grooves on floor; no stamps preserved (probably none originally).

Two separate series of dishes and bowls may be distinguished. Type B is the successor of Type A; nos. **21–22**, with concave sides, appear to be the final stage in this series. The parallel bowl-type, C, appears shortly after A, to judge by the stamped decoration of **23–24**, though it is not common until considerably later. It may represent the continuation of Form 103. The earlier pieces in this series are distinguished by a heavy rim and a rounded foot; the later ones have smaller rims and angular feet, and tend to be more deep-bodied. On the later pieces of the bowl series and one or two late pieces in the dish series the stamped decoration disappears. This form is the normal medium for the large stamped motifs of Style E (ii), the latest of the styles of stamped decoration on the African wares. A progressive deterioration in the technique of the decoration may be observed, from the neat and well-balanced compositions of pieces such as **3–4** to the crude sprawling motifs on pieces of Type B. The borders of grooves on the earlier pieces vary; a revival of the triple groove scheme (probably borrowed from silverware) may be noted. In the later stages a border consisting of two grooves, slightly separated, seems to become canonical; this scheme survives on the unstamped examples. No. **1** may be classed as an early variant; the single groove border to its decoration finds a parallel on Form 103 (no. 3 in list above), while in other respects the decoration comes close to that on nos. **3–4**.

The earliest dated pieces are of the second quarter of the sixth century. No examples were found in the earthquake deposit of 526 at Antioch, but Type A occurs in the Athenian Agora in a deposit of *c.* 530–50 (Deposit O–Q 18–19). Nos. **2–11**, with their high rims and neat stamps, probably belong to this period. The Agora piece **13** represents a slightly later stage of development, with the rim

[1] A. M. Schneider, *Die Brotvermehrungskirche von eṭ-ṭâbġa am Genesarethsee und ihre Mosaiken* (Collectanea Hierosolymitana, 4; Paderborn, 1934); English ed., *The Church of the Multiplying of the Loaves and Fishes at Tabgha on the Lake of Gennesaret and its Mosaics* (London, 1937).

[2] D. calculated from published drawing; the text gives 'about 0·25 m.', which would be abnormally small for such a piece.

becoming more rounded; it comes from a deposit of *c.* 550 (with associated coins to Justinian and possibly Baduila (541–552)), together with frs. similar to **2–3**. Type B appears by the end of the century; **15** comes from a closely dated deposit of *c.* 580–585. Some Agora fragments with low knobbed feet mark the transition from Type A. The Karanis pieces **16–19** are presumably contemporaries of **15**; their stamps seem late. **21–22** could be later; the context of **22** indicates a date possibly as late as the middle years of the seventh century. The dating of Type C is less secure, but the decoration on **23–24** suggests a date for these pieces quite early in the overall series, around 550 or just after. **24** was found together with a predecessor of Form 105 (no. 1 in list below), which supports this. The Antioch bowl **25**, of rather more developed form, comes next in the series; it should not be much later, for its main stamp type is closely paralleled on a fr. of Type A from Karanis (Univ. of Michigan 20979). **27** is probably to be placed near 600; it is one of a group of vessels associated with a coin of 574/5 (Delougaz (1960) 51, no. 11). It should be among the last of the stamped bowls. **28** could be of similar date; it was found together with late pre-Arab material and coins of 565/6 and 574/5. The late unstamped series probably continues well into the seventh century; the context of the Apollonia piece **29** could be as late as *c.* 640.

Suggested dates: Type A—*c.* 530–580.
Type B—*c.* 570–600, with late variants to 625+.
Type C—*c.* 550–625.

Note: two pieces published by Lamboglia (1963) 197, 202–3 (Tarragona, uncat. = form 53, and Barcelona 4028 = form 55) may belong to this form, though it seems more likely that the first is a version of Form 87, and the second a forerunner of Form 105.

FORM 105

Antioch 802.

Large plate, with shallow sloping floor terminating in a heavy knobbed rim, and rounded foot of medium height. Thick coarse ware, similar to that of Forms 103–104, with slip on inside and over rim. Floor well-smoothed, underside rough, with brush-marks. Slip often thin and poor compared with earlier Forms. Rim tends to be flattened on top, convex on outside, and flattened and slightly hooked on underside; a squarish profile is common. Outer part of floor often stepped up by means of a chamfered band over foot. Foot heavy and rounded, higher on outside than inside, often marked off from body by a groove or slight offset. Undecorated. Size-range: D. 30–42 (variants occasionally larger). Very common.

Examples:

Early variants (Form 90/105)

1 Kenchreai (Greece) P 325. D. *c.* 34. Shape as Form 105, with rather angular foot bearing two lines of rouletting. Groove at edge of floor close to rim, as on Form 104. No chamfer.

*2 Tocra (1964 excavations), uncat. Fr.; est. D. of foot 17. Two grooves on foot, two on floor.

Normal (D. here = maximum diameter)

*3 Corinth C–56–26. Est. D. 32·5; fragmentary. Rim rather tall and short. Chamfer on floor. Two grooves on foot.

4 Antioch excavations; Waagé (1948) 47, pl. VII, shape 802f. D. *c.* 30·8. As **3**, with one groove on foot.

5 Aphrodisias, from S.W. church (1962). D. *c.* 32·8. As **4**.

*6 Sami (Greece), Roman Baths. Est. D. 33·5; fragmentary. Similar, without chamfer on floor.

*7 Athens, Agora P 7430. D. 34·7. Broader, more rounded rim. No chamfer. Small offset on foot.

*8 British School at Athens, from Rafti Island, Porto Rafti; Hood, *Acta Mus. Nat. Pragae* xx (1966) 170–1, fig. 18b.1. Est. D. 39·1; fragmentary. Similar; one groove on foot.

*9 Apollonia (Cyrenaica), Byzantine Palace. Est. D. 40·0; fragmentary. As **8**, with thicker, more rounded foot.

*10 Apollonia (Cyrenaica), Byzantine Palace. Est. D. 32·0; fragmentary. As **9**; one line of rouletting on foot.

11 Piazza Armerina (Sicily); *NSc,* 1950, 334, fig. 30.1. D. *c.* 35·5. Rim as **8–9**; small chamfer; foot thin.

12 Ascoli Piceno (Italy), Castel Trosino cemetery; *Mon. ant.* xii (1902) 267, fig. 143. D. 39·0. Details of floor and foot uncertain.

*13 British Institute of Archaeology, Ankara, from Iznik. D. 32·1. Rim rather small, short on top. Chamfer. Groove on foot.

14 Bodrum (Turkey), from Yassı Ada wreck; G. Bass, *Arch. Anz.,* 1962, 556, fig. 9. D. *c.* 33·5. Chamfer. No groove indicated on foot.

*15 Emporio, Chios, from Byzantine fort. D. 39·5 (40·5 Boardman).[1] Chamfer. One groove on foot.

*16 Same. D. 39 (38·5 Boardman).[1] Floor flattens out a little over foot; no chamfer. Foot plain.

*17 Same. Est. D. 31; fragmentary. As **15**, smaller. Shorter more rounded rim.

Variants

18 Abu Mena 65.909. D. *c.* 41·0 (lip). Rim squarish, hooked below. Two lines of fine rouletting on edge of floor, next to rim. No chamfer. One groove on foot. Rather poor slip.

*19 Newcastle upon Tyne, Mus. of Antiquities, from Boreum (Libya). Fr.; est. D. 45. Rounded rim. Several lines of rouletting round edge of floor. Poor slip.

There are no very clear criteria for dating individual pieces within the series. The most obvious features—the presence or absence of a chamfer on the floor, and of grooves on the foot—do not seem to have any chronological significance. The shape of the rim may be of some importance: rims with a vertical emphasis seem to be predominant in the earlier contexts, broader and more rounded ones (as **9**) in later ones. Size may also be a distinguishing feature; the larger examples, with a

[1] The drawing follows Boardman.

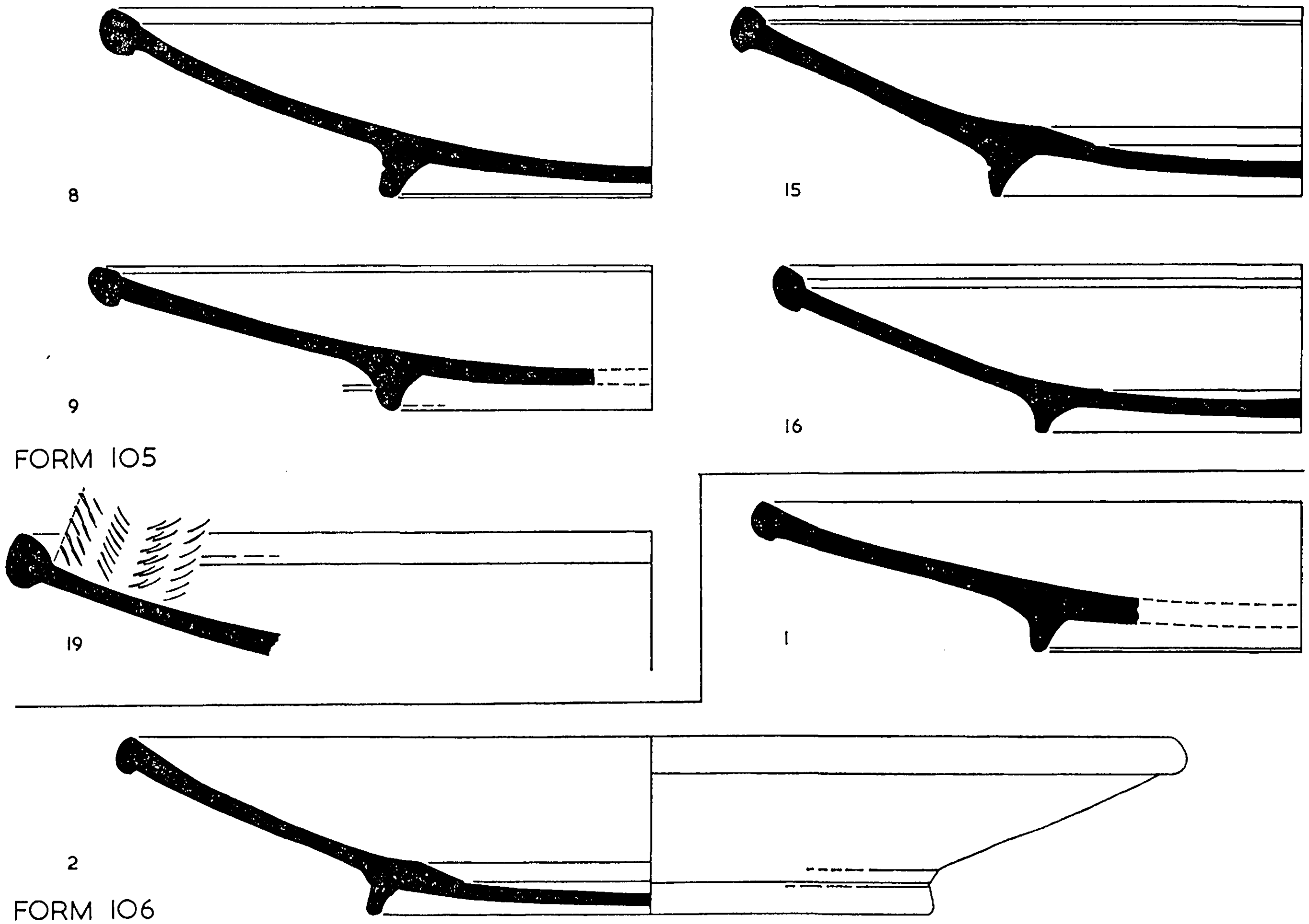


FIG. 32 Scale 2 : 5

diameter of *c.* 38–40 cm., appear mainly in late contexts (see **9**, **15**, **16**). In the Emporio group two distinct sizes are present (D. 30–32 and 38–40). In earlier deposits a diameter of *c.* 30–34 cm. seems to be the rule. The list above represents an attempt at a chronological arrangement.

No. **1** seems to be an immediate forerunner of the form; the decoration on its foot hints at some connection with the later examples of Form 90. It was found together with Form 104. 24, and may date from the third quarter of the sixth century. Another possible forerunner is the plate Barcelona 4028 (Lamboglia (1963) 202–3, form 55), with a rather high foot and two grooves on the floor; one or two frs. from the excavations at Tocra (Cyrenaica), of normal fabric, show these features.

Form 105 is the most typical vessel-form in the final period of production of the African factories. Its *floruit* spans the early to middle years of the seventh century. It is common in the late levels of such sites as Tocra and Apollonia in Cyrenaica, which may be dated to the first half of that century, in the final pre-Arab levels on sites in the East, and in contexts of the Slavic invasion period in Greece. It is regularly found together with the latest varieties of Late Roman C ware (Form 10, see below). One of the earliest well-dated examples is **3**, from a group of *c.* 600 (found together with Form 99. 23, *q.v.*). The form is present in a group of about 610 at Antioch,[1] as also in later contexts. In the Athenian Agora a number of frs. have been found in levels dated by coins of Heraclius; no. **7** is probably of this period, though not from a good context. The Apollonia pieces **9–10** may date from the period of the Arab conquest of Cyrenaica in the early 640s. No. **12** comes from a cemetery which produced late sixth-century coins reused in jewellery; a seventh-century date seems natural. The Yassı Ada wreck, which produced **14**, appears to date from the years just prior to the middle of the seventh century; coins of Heraclius were found on it, together with coarse wares very similar to those from Emporio (see below). The latest examples of the form to come from a datable context are those from Emporio (**15–17**), from a destruction deposit dated by coins to *c.* 660 (with similar vessels from the occupation immediately preceding).

The few large variants with rouletted decoration seem to belong to the same period as the main series. The context of the Abu Mena plate **18** indicates an early–mid seventh-century date.

Suggested dates: c. 580/600–660 +. Early variants late sixth century.

FORM 106

Antioch 801.

Large plate, as Form 105, but with rolled rim. Undecorated; treatment of foot and floor as on Form 105.

Size-range: D. 32–39. Uncommon.

Examples:

*1 Apollonia (Cyrenaica), Byzantine Palace. Max. D. *c.* 39·0; fragmentary. No chamfer; no groove on foot. Underside of rim flattened.

*2 Emporio, Chios, from Byzantine fort. Max. D. 38·6. Discoloured by

[1] *Antioch* iv.i 57, deposit in sector 27–O, with coins to Phocas.

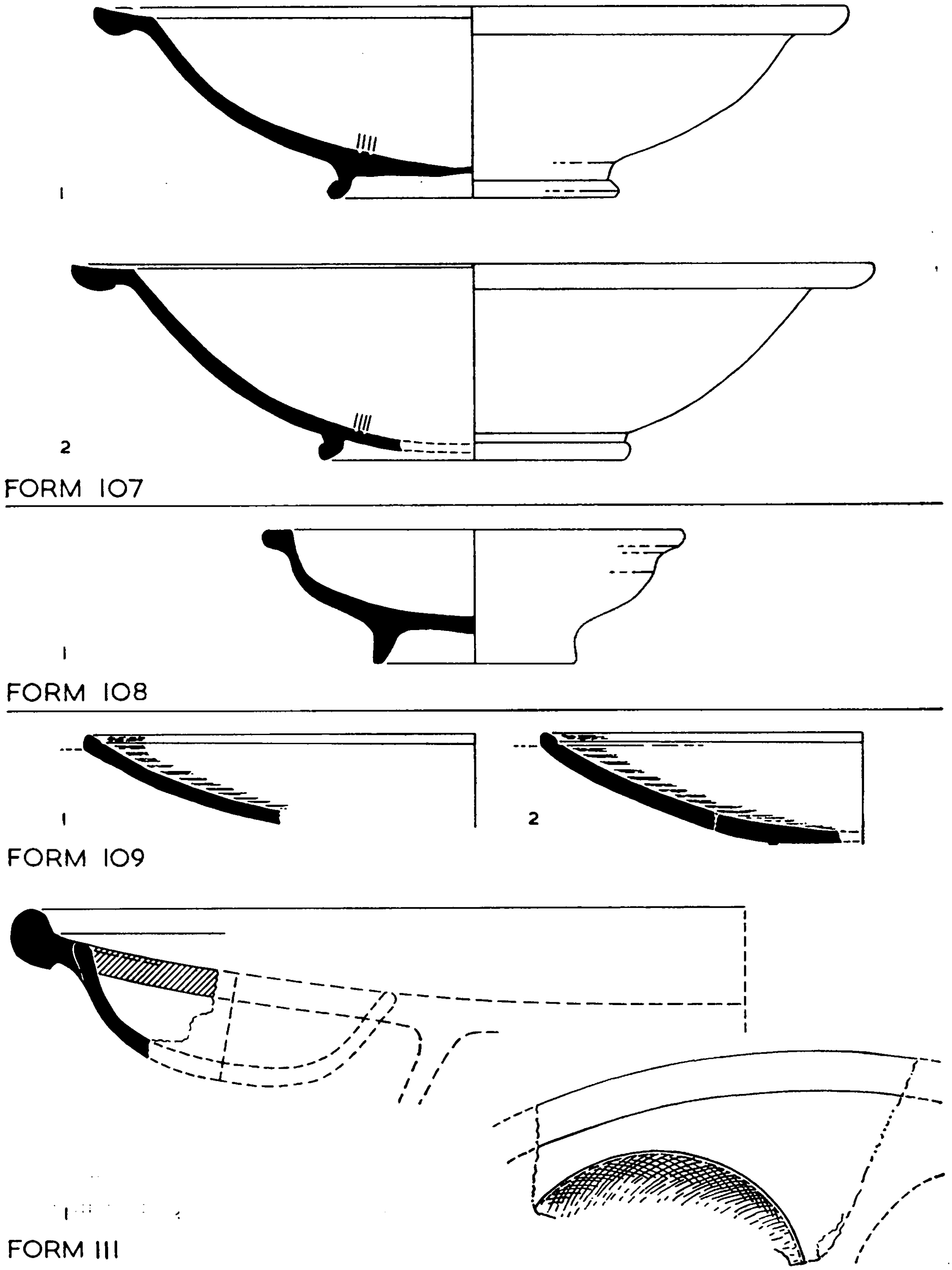


FIG. 33 Scale 2 : 5

fire; buff to orange in colour, with some parts blackened. Poor thin slip. Prominent turning-marks on inside and outside. Chamfer on floor. One groove on foot. Underside of rim rounded.

For the contents of these pieces see under Form 105 above. The form occurs at Antioch in the early seventh century (see *Antioch* iv.i 57), and in the seventh-century levels at Tocra. A variant from Tocra with a small hooked rim and a burnished interior should be earlier; this is perhaps to be classed as a variant of Form 87.

Suggested dates: c. 600–660 +.

FORM 107

Antioch 852.

Large bowl, with rounded body, flat rim with heavy roll on underside, and knobbed foot of medium height. Cf. Form 93. Fabric rather as Form 93, with tendency to a pimply surface and thin dull slip. Two grooves on floor; otherwise undecorated. Size-range: D. *c.* 27–30. Common.

Examples:

*1 Tocra (Cyrenaica), from 1964 excavations. D. *c.* 28·4; fragmentary.
*2 Tolmeita (Cyrenaica), uncat. D. *c.* 30·0; fragmentary.
3 Antioch excavations; Waagé (1948) pl. IX, shape 852p. D. *c.* 27·5; fragmentary. Three (?) grooves on floor.
4 Apollonia (Cyrenaica), Byzantine Palace. D. 28·0. Fragmentary. One groove on floor.

Perhaps a continuation of Form 93; evidence from the second half of the sixth century is however lacking. Nos. **1** and **4** come from deposits of the first half of the seventh century, together with numerous frs. of the same form; the context of **2** could have been similar.[1]

At Antioch the form occurs only in the seventh-century deposits (including the sector 27–0 deposit noted under Form 105). It regularly accompanies examples of Form 105.

Suggested dates: c. 600–650.

FORM 108

Small bowl with shallow floor curving up to form a low wall, short thick flattened rim and rounded foot of medium height, curving smoothly into body. Fabric as the above, of rather poor quality; cf. Form 91D. Undecorated.
Rare. Only one well-preserved example:

*1 Tocra (Cyrenaica) 64/227. Est. D. 15·9; most of rim missing.

Perhaps a late crude version of Form 98B. No. **1** comes from the same early seventh-century level as Form 107.1. A few frs. of similar type are recorded from the late levels at Tocra and Apollonia.

Suggested date: early seventh century.

[1] Unstratified, but from the top levels of the site.

FORM 109

Antioch 805x.

Dish with shallow curving floor ending in a plain rim, marked off by a groove; flat base or slight foot. Coarse granular ware, with poor slip over inside and rim. Floor covered with thin burnished bands, forming a continuous spiral ('spiral burnishing').

Size-range: D. *c.* 24·5–29+. Rather common; no complete specimens.

Examples:

*1 Tocra (Cyrenaica) 64/105. Est. D. 29·0; fragmentary, base missing.

*2 Tocra, 1964 excavations. Est. D. 24·5. Fragmentary; profile restored from two frs. Slight foot.

3 Antioch excavations; Waagé (1948) 47, fig. 28.15, pl. VIII, shape 805x. D. *c.* 27·0; fragmentary.

A companion-piece of Forms 105 and 107, frequently found together with them in the early–mid seventh-century levels in Cyrenaica and at Antioch. The presence of large numbers of frs. of this form in an Istanbul group (*DOP* xxii (1968) 208, fig. E, nos. 41–43) may indicate that it came in rather before 600, though Waagé notes that it was not present in the 27–0 deposit at Antioch (see above under Form 105).

Suggested date: c. 580/600–mid seventh century.

FORM 110

Antioch 886.

Deep bowl(?) with rounded body and slightly flaring rim, ledged on inside at junction with body; groove(s) on outside of rim. Two fragmentary examples only: *DOP* xxii (1968) 208, fig. E, no. 58 (from Istanbul); *Antioch* iv.i 50 pl. X, shape 886. Est. D. of the first, 20.

The Istanbul fr. is similar in fabric to Form 99 ff., with a bright slip on both inside and outside. The drawing of the Antioch piece suggests a more open shape than that of the Istanbul one, but the general form is similar. The context of the Istanbul piece would seem to indicate a date between the mid sixth and mid seventh century.

FORM 111

Large serving-dish with inset compartments. General shape as Forms 104A and 105, with shallow floor and heavy knobbed rim. Outer part of floor broken by a series of fairly large circular bowl-shaped receptacles, individually wheel-made and inserted, projecting well below line of floor. One fragmentary example only:

*1 Newcastle upon Tyne, from Tocra, Cyrenaica (surface find). Est. D. *c.* 55, internal D. of compartments est. *c.* 11·5. Large fr., comprising part of rim and part of one bowl; edge of a second visible on underside. (Profile restored.) Compartments close-set; originally eight to ten, if evenly spaced. Thick granular ware with quartz particles, etc.; thick bright slip over inside and rim. Slight turning-marks on rim.

For the probable overall shape of this unusual piece, see Winlock and Crum (1926) 88, fig. 40, pl. XXXIII A (Egyptian 'A' ware), which has a bowl-shaped compartment with a low foot at the centre. The form seems related to a series of silverware sacramental patens (e.g. the Stuma paten[1]) and the parallel series of Early Christian marble altar-tables, though its function need not necessarily have been liturgical. A few other dishes or trays with similar round compartments occur among the earliest Byzantine and Islamic lead-glazed wares (seventh–eighth century);[2] these, however, are mostly of rectangular shape.

The closest parallels in fabric to the Tocra fr. seem to be the later coarser examples of Forms 99 and 104. I suggest a date in the late sixth century or the first half of the seventh century (a period well represented at Tocra).

FORMS 112–120: vacant

FORMS 121–127: closed feeder-vases, etc.

All in early fabric, with slip on the outside only

FORM 121

Lamboglia 16.

Feeder-vase with strainer. Biconical body with wide mouth and slight rim; a strainer across mouth. Flat base with pronounced base-moulding; a groove close to edge marks off a small foot. Raised fillet on lower part of body, next to base. Grooved ring-handle attached to upper part of body; short spout set at right-angles to it. Not uncommon.

Examples:

*1 Sebha Mus. (Libya) H 7, from Germa. Rim D. 7·8, H. 7·8. Thin strap-like handle with one groove. Thin-walled. Strainer-holes on part of top opposite spout only, with one at centre.

2 Sebha Mus. H 12, from Germa. Rim D. 8·7, H. 7·7. As **1**, but with more sagging body. Handle and strainer as **1**. Thin flaky clay, with thin dull flaking slip.

3 Nissan, Coll. Giry, from Aix-en-Provence; Lamboglia (1958) 284, form 16. Rim D. *c.* 6·3, H. *c.* 7·2. Similar, but with plain flat base with low moulding; handle of cruder shape, spout set obliquely.

4 London Museum, Layton Coll. P 165. Rim D. 6·9, H. 7·3. Similar, of deepish biconical form; crude grooved handle; base normal. Spout set obliquely, close to handle; arrangement of strainer similar to **1**. Fine glossy slip.

5 Sassari, Mus. Naz., Coll. Sanna 243; ref. Lamboglia (1958) 284. Apparently as **3**, but with part of top cut away.

6 Sétif, from cemeteries; Février (1963) 127, fig. 1. Rim D. *c.* 7·0, H. *c.* 6·7. More rounded shape than **1**, with more concave top, and base-moulding and fillet above of reduced size. No handle indicated.

[1] Dodd (1961) no. 27, with bibl. cited.

[2] F. E. Day in Delougaz (1960) 43–44, pl. 62.3; A. Lane, *Early Islamic Pottery* 12, pl. 4 E.

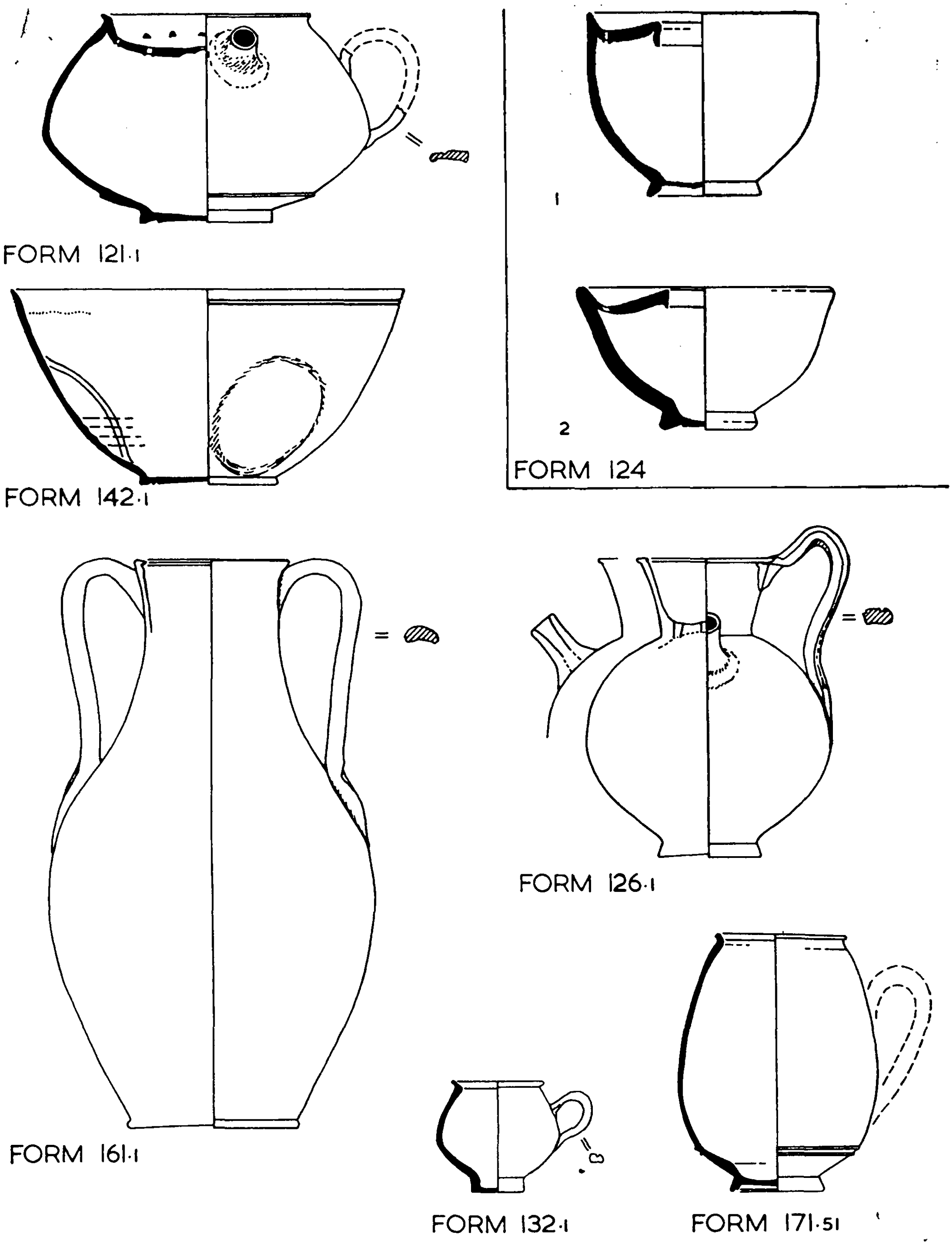


FIG. 34 Scale 2 : 5

The order in which these pieces are listed may correspond to the chronological development of the shape. Nos. **1–2**, which form part of the same general group as Form 2. 1, etc. above, should be of Flavian or at the latest Trajanic date. The others could be second-century pieces.

FORM 122

Feeder-vase with more or less cylindrical body, fluted horizontally, and closed domed top, with a projecting mouth attached to one side, a small spout on the other, and a loop-handle on top.

Three examples only, of two types:

Type A

1 Leiden H& 10, from Festour; Holwerda no. 683, fig. 16. H. as preserved 8·4. Handle missing; stump indicates that it bore two grooves. Angular slightly concave body, widening towards bottom. Low foot (as on Form 124. 1). PLATE II*a*.

2 Tunis, Bardo, from Bulla Regia; *Cat. Alaoui* (1897) 237, pl. XLII, no. 217. H. 9·6. Rear spot missing. Similar.

Type B

3 Leiden HL 1, from Sousse region; Holwerda no. 684, fig. 16. H. as preserved 8·3. Handle, mouth and spout broken off. More rounded body with vertical sides; flat base with moulding (as on Form 123). Front spout wider than on **1**; perhaps originally more as on Form 123. Handle probably grooved, joining on to rear spout. Glossy slip. PLATE II*b*.

The foot of **1** indicates that this is an early form; it may represent the predecessor of Form 123, with its similar mouth for filling and small spout at the rear. Probably a contemporary of the preceding form.

FORM 123

Lamboglia 15.

Askos. Body elongated and bird-shaped; short constricted spout with bell-shaped mouth rising almost vertically at front end, small horizontal tubular spout at back, and handle with central groove along top; small flat base with high external moulding. The body is wheel-made in one piece with the base (scratches on a few examples reveal the manner of manufacture), and pulled out into an oval shape, so that the rim comes together in a straight line along the top (usually revealed by a small raised 'seam', partially masked by the handle), with slight bulges at the ends. The spouts and handle are separate additions. One example (see below) is actually given a front spout modelled to look like a bird's head. Shape and size fairly standardized. Rather common.

Examples:

1–3 Tunis, Bardo, from Bulla Regia; *Cat. Alaoui* (1897) 237, no. 216, pl. XLII (one ex. illustrated). One of these (L. 14·5) has a foot in place of the normal flat base; its slip is fine and glossy.

4 Carthage, Lavigerie. L. 14·8. Normal.
5 Toronto 926.50.10, from Carthage. L. 15·2, H. 8·1. Dull slip. PLATE II*c*.
6 Louvre CA 2889, from Sousse, L. pr. 14·5. Front spout missing. Poor dull slip.
7 Copenhagen ABc 167; *CVA Copenhague 7*, pl. 311.11. L. pr. 13·8, H. 9·4. Front spout missing.
8 Leiden HA 16; Holwerda no. 685, fig. 16. L. 14·6. Handle missing.
9 Cherchel; *Bull. soc. géog. et arch. d'Oran* x (1890) 263–4, fig. 8.
10 Tripoli (Libya), from Mdeina Doga (1950). L. 13·3.
11 Cyrene AM 1907, from Benghazi; *Notiz. arch.* i (1915) 94 fig. 12.7. L. of body *c.* 11. Handle and front spout missing. Normal.
12 Vatican, Museo Sacro 1332, from S. Sebastiano catacombs, Rome. L. 15·1 +, H. 8·7. Rear spout filed down slightly. Normal.
13 Mainz RGZM O 34859. L. 15·0. Handle broken. Normal.
14–16 Yale 1913.549–551; Baur, *Cat. Stoddard Coll.* 254, fig. 108, nos. 549–551 (550 bought in Rome). L. 14·6, 14·2, 14·7 (restored); H. 8·9, 8·3, 7·3. Handles of 550–1 and rear spout of 551 missing. Wheelmarks visible on body of 550.
17 Univ. of Michigan 6619, formerly in the Van Deman Coll., from Rome area; *CVA Robinson Coll. 3*, pl. 37.7. L. 14·7, H. 7·7.
18–20 Lipari, tombs 25, 151*bis* and 155; Bernabò Brea and Cavalier, *Meligunìs-Lipára* ii 15, pl. 225.1b, p. 52 (not figured), p. 53, pl. 225.3h. L. 12·5, 17, 13·7.
21 Genova-Pegli, Museo Civico 1081; *CVA Genova-Pegli 1*, IV Bf, pl. 1.6; ref. Lamboglia (1958) 283. L. 13·6, H. 9·7. Deeper than usual.
22 Ostia; Lamboglia (1958) 283. Est. L. *c.* 14·0, H. *c.* 8·4.
23 Mailhac (S. France), from Les Oules; ref. Lamboglia (1958) 284.
24 Tarragona, necropolis no. 540; ref. Lamboglia (1958) 284.
25 Cartagena; *Notic. arq. hisp.* i (1952) fig. 59 on p. 150, no. 9.

Variant

26 Tunis, Bardo 2625, from el-Djem area. Front spout modelled in form of bird's head. Good slip.

This form seems to have had a fairly long life, spanning more or less the whole of the second century and perhaps lasting into the third. The Tunis example with a foot (**3**) may mark the beginning of the series; those pieces with a dull slip, as **6**, presumably belong together with Forms 8B, 16 and the like, of the latter part of the second century. The deep example **21** may also be early. A fragment from Ventimiglia was found together with late first- to early second-century material.[1] The Lipari pieces **18–20** were associated with pottery and lamps of around the second half of the second century.

Suggested date: early second–early third century; mainly mid–late second century.

[1] Lamboglia (1950) 36, fig. 9, no. 22. The context seems slightly disturbed.

FORM 124

Lamboglia 16 *bis*.

Inkwell, corresponding to Ritterling Form 13 in Gaulish T.S. Top slightly convex, with large central hole surrounded by a small hanging lip, and a small subsidiary hole (for drainage?) to one side; low rim round edge. Shape of body varies. Two complete examples only, of different types:

*1 Yale 1913.552; Baur, *Cat. Stoddard Coll.* 255, no. 552 (not illustrated). D. 8·6, H. 6·9. Deep-bodied, with vertical sides, curving inwards at bottom; low foot (as on the early dish/bowl series). Good bright slip. Similar: a fr. in Ostia (uncat.; est. D. *c.* 8·6; base missing).

*2 Ostia 5735; Lamboglia (1958) 284–5, form 16 *bis*.[1] D. 9·6, H. 5·4. More shallow splaying form, with flaring sides, curving inwards at bottom; flat base with moulding at edge, and a shallow groove on bottom defiining a slight foot. Only slight hanging lip. Traces of black substance remain on inside.

Vessels of similar shape occur in a number of Early Roman fabrics. They appear to be commonest in Gaulish T.S.; see Oswald and Pryce (1920) 209–210, pl. LXX. The shape is also found in Eastern Sigillata B ware, in the local fabric of Corinth,[2] and in a fabric closely related to that of Italian lamps of the first century.[3] The African version is probably copied from the S. Gaulish product, which was widely exported in the latter part of the first century[4] and may have been the prototype of the whole series. No. **1**, with its near-vertical sides and pronounced hanging lip, is fairly close to the standard Gaulish type, though this normally has a broader base. It should therefore belong to an early phase of the ware; I suggest a Flavian or possibly Trajanic date. The Ostia example **2** seems to be a second-generation piece, no longer under direct influence from the Gaulish prototype; it should belong to the second century.

FORM 125

Lamboglia 27.

Cruet. Globular body, flat base with moulding, narrow neck with filter at bottom and small loop over mouth. One example only:

1 Ostia; Lamboglia (1958) 294, form 27. Total H. *c.* 8·4.

Date uncertain; probably second century, as Form 123.

FORM 126

Spouted jug, with globular body, flat base with moulding, and slightly flaring neck with flattened rim. Grooved handle from rim to body (with 'rat-tail' at bottom); on shoulder, at right angles to it, a short tubular spout. Strainer across bottom of neck, with five holes in quincunx pattern. No slip inside neck.

[1] The piece is here redrawn.

[2] Several examples from mid first-century groups, unpublished.

[3] Yale 1913.578; Baur, *Stoddard Coll.* no. 578.

[4] Several examples have been found at Corinth.

Examples:

*1 Louvre CA 2875, from Sousse. H. (to rim) 11·2.
2 Tunis, Bardo (marked '1004'). H. 10·8. As **1** (handle missing).
3 Sousse Mus. Similar; neck and handle missing.

Perhaps the successor of Form 121, with which it shares a similar arrangement of strainer and spout.

Date uncertain; probably second century.

FORM 127

Wine-dipper(?). Round-bellied, with long narrow neck, closed at top except for a small aperture, and low delicate foot. Bottom perforated to form a strainer. Handle from neck to body, mould-made, bearing relief decoration (as on the appliqué-decorated series Forms 171–9). Fine thin fabric, with well-smoothed surfaces and glossy slip.

Only one complete example:

1 Tunis, Bardo, from el-Aouja; Merlin, *BAC,* 1916, CXXVII, no. 6, fig. 1; *Cat. Alaoui* (1922) no. 1098. H. 19. Handle: central ridge flanked by rows of oblique strokes. Similar: Athens, Agora P 17592 (rim to neck fr.).

Part of same series as Forms 171–179; cf. Salomonson (1968) Tabl. II, VII.
Probable date: first half of third century.

FORMS 128–130: vacant

FORMS 131–140: Mugs

Slip on outside only. Bases flat. Handles of 'sliced' variety, bearing two or more grooves. Early fabric. All the following forms are rather uncommon, and rarely found outside Tunisia.

FORM 131

With sagging body (of 'bag-beaker' type) and small rim-moulding; handle on body.

Examples:

1 Leiden HP 47, from el-Djem region; Holwerda no. 662, fig. 16, pl. VI. H. 9·2. Fine groove level with top of handle. One groove on handle. PLATE II*d*.
2 Leiden HSS 11, from Tunisia; Holwerda no. 663, fig. 16. H. 8·7. Three grooves on handle.
3–4 Pollentia (Majorca), Can Fanals cemetery; *Ampurias* xv–xvi (1953–4) 259, fig. 18.2–3. H. 9·3, 9·0. Apparently this ware. **4** of more globular shape, tending towards Form 135.
5 Carthage, Lavigerie. Similar. Two lines of rouletting on body.

Cf. the first-century Italian shape Sutri form 1.[1] Probably very early in the series.

[1] *PBSR* xxxii (1964) 54–55, fig. 7.

FORM 132

Lamboglia 14A.

Miniature version of Form 131, with broad sagging body. Central groove on handle. Undecorated.

Examples:

*1 Saloniki Mus. 3408, from Mevlehane.[1] H. 4·2. No slip under base.
2 Arles, Musée Réattu P. 948; Lamboglia (1958) 282–3, form 14A. H. *c.* 4·8. Similar.
3 Pollentia (Majorca); Martin de Castillo, *RCRF Acta* vii (1965) 72–73, form 28. H. 6. Similar.
4 Smithsonian Inst., Washington D.C., 154483. H. 5·0. Rather taller, more slender form than **1–3**; two grooves on handle.

Date presumably as Form 131.

FORM 133

Miniature mug (cf. Form 132). Jar-shaped, with low bead-rim and flat base; handle on body.

One example only:

1 Malta, Rabat Museum, uncat. Rim D. 4·2, H. 5·3. Groove round shoulder. Two grooves on handle. Normal early fabric.

FORM 134

With handle folded over in a small loop at top, and bearing multiple grooves. Body almost globular, with short flaring rim bearing a groove at lip.

Two examples only:

1 Tunis, Bardo, from Bulla Regia; *Cat. Alaoui* (1897) 237, pl. XLII, no. 215. H. 12·0. Four grooves on handle. Four indentations on body (cf. Form 142).
2 Leiden H II 27, from La Malga, Carthage; Holwerda no. 667, fig. 16. H. *c.* 8·5. Three grooves on handle. Undecorated. PLATE III*a*.

The handle-form appears to be influenced by glassware; similar folded handles occur on some Italian pottery vessels of around the end of the first century, which is the probable date of this form. The indented decoration of **1** would fit such a date (cf. Form 142). In fabric no. **2** is very similar to the Leiden examples of Form 131, of which it is probably a contemporary.

[1] I cannot locate this place.

FORM 135

Broad and shallow, with sagging body and small rim-moulding; handle on body; rouletted decoration. Two grooves on handle.

Examples:

1 Copenhagen ABc 106a, from Tunisia; *CVA Copenhague* 7, pl. 305.5; Pallarès (1960) 280, form 14A (with profile). H. 7·0, rim D. *c.* 7·4. Zone of spiral rouletting on body.

2 Leiden H III Z 44, from Tunisia; Holwerda no. 664, fig. 16, pl. VI. H. *c.* 7·5, rim D. 7·7. Four lines of spiral rouletting on body, with grooves above and below. PLATE III*b*.

3 Leiden HAA 19, from Beja region; Holwerda no. 665. Rim D. 7·9. Base and handle missing. Three lines of rouletting on body, with a groove above.

4 Malta, Rabat Mus., uncat. H. 7·2, rim D. 8·2–8·5. Three lines of rouletting.

Variant

5 Leiden HMM 46, from Beja; Holwerda no. 677, fig. 19. H. 7·2, rim D. *c.* 8·4. Five indentations on body; no rouletting. PLATE III*c*.

A broader version of Form 131, probably going with the later examples of that form. End first to early second century?

FORM 136

Pallarès 28.

Rather slender, high-bellied form, with short flaring rim; handle on body; rouletted decoration.

Examples:

1 Copenhagen ABc 662, from Tunisia; *CVA Copenhague* 7, pl. 305.4; Pallarès (1960) 284–5, form 28 (with profile). H. 10·1. Two grooves on handle. Three lines of rouletting on body.

2 Leiden H III Z 45, from Tunisia; Holwerda no. 666, fig. 16. H. 9·0. Three grooves on handle. In handle-zone, 4+2 lines of rouletting, between grooves. PLATE III*d*.

3 Carthage, Lavigerie. H. 9·7. Two grooves in handle-zone, two lines of rouletting below.

A contemporary of Form 135. The shape is closely related to the series of late Italian thin-walled ware mugs with vertical slashed decoration (cf. Holwerda nos. 800–815); for rouletted examples of this series see Holwerda nos. 816–821, fig. 19. End first to early second century.

FORM 137

Lamboglia/Pallarés 26.

With sagging, sometimes carinated body, and short outcurved rim; handle from rim to belly. Groove(s) at belly, normally combined with rouletting. The shape varies a good deal.

Examples:

1 Barcelona M. 15, from Ibiza; Lamboglia (1958) 294, form 26b. H. *c.* 8·6. 'Bag-beaker' shape. Two grooves just below belly, flanked by rouletting (3 lines above, one below).

2 Ostia 16066. D. of belly *c.* 9·0. Fragmentary; base and one side only. Form similar, tending towards **3**. Two grooves on belly, with two lines of rouletting above and two below.

3 Copenhagen ABc 680, from Tunisia; *CVA Copenhague* 7, pl. 305.1; Pallarés (1960) 282–3, form 26A (with profile). H. 10·5, D. of belly 9·9. More carinated form; upper part of wall slightly concave. Groove on inside of rim. Groove at belly; broad zone of spiral rouletting on upper part of body. Groove under edge of base.

4 Leiden HP 48, from el-Djem region; Holwerda no. 672, fig. 16. H. 9·4. As **3** (without grooves at belly and on underside). PLATE IV*a*.

5 Leiden HX 50, from Carthage; Holwerda no. 671. H. *c.* 8·4. Form similar, with groove inside rim. Two grooves at belly; no rouletting.

6 Leiden H II 26, from La Malga, Carthage; Holwerda no. 670, fig. 16. H. 9·4. More rounded form. Rim as **3**. One line of rouletting on belly, flanked by two pairs of grooves. PLATE IV*b*.

7 Copenhagen ABc 119, from Tunisia; *CVA Copenhague* 7, pl. 305.7; Pallarés (1960) 283–4, form 26B (with profile). H. 9·4. Variant with rounded body; short rim, grooved on inside. Two grooves on belly; no rouletting.

The form appears to start as a variant of Form 131 (see no. **1**). For the grooves on the belly cf. Form 144.3. Nos. **3–4**, with their broad bands of spiral rouletting, should be related to Forms 138–139. Probable date-range: end of first century to mid second century or later.

FORM 138

Carinated form, with collar-like rim, slightly offset from body; handle from rim to belly. Groove on top of rim; broad zone of spiral rouletting on upper part of body. Three grooves on handle.

Examples:

1 Copenhagen ABc 676, from Tunisia; *CVA Copenhague* 7, pl. 305.2; Pallarés (1960) 282–3, under form 26A (with profile). H. 10·8.

2 Leiden HA 30, from Carpi; Holwerda no. 668, fig. 16, pl. VI. H. 9·3. Glossy slip; rather smooth fabric. PLATE IV*c*.

Variant

3 Cadiz (Spain), from Carteia; C. Peman, in *Corona de Estudios . . . a sus Martires* (ed. J. Martínez Santa-Olalla; Madrid, 1941) i 261–2, pl.

XXXI, 5; reprinted as *Informes y Memorias* no. 1 (Madrid 1954) 36, no. 7, pl. II. 5. H. 12·6, D. of belly 9. Similar, but with handle on body. No slip?

Date second century, or perhaps slightly later; related to the later examples of Form 137 and also Form 139. A rim fr. of this form (or Form 139) occurred at Ampurias in a context of around the end of the second century (*Ampurias* xxi (1959) 5, fig. 3.3). Probably the forerunner of the series of ridged mugs in unslipped fabric (see Form 200 below).

FORM 139

Slender curved form, with rim and handle as on Form 138. Groove on top edge of rim; broad zone of spiral rouletting on upper part of body.

Only one example:

1 Leiden HA 29, from Carpi; Holwerda no. 675, fig. 16. H. 11·4. Thin fine-grained clay, with glossy slip. Three(?) grooves on handle. PLATE IV*d*.

Possibly forming a group with Form 138·2. The fine fabric suggests a connection with the appliqué-decorated series of the early third century (Forms 171–9). (Cf. Salomonson (1968) 105, form A 14.)

FORM 140

Lamboglia 14.

Round-bellied with slight shoulder, on which is set a collar-like rim; handle on belly. Rows of small indentations on belly, sometimes combined with rouletting. Three grooves on handle.

Two types:

A fairly broad-bellied, with a low base-moulding. Normal ware.

B rather taller, with high base-moulding. Fabric rather thick and coarse. Groove under edge of base. Decoration: line of rouletting flanked by two rows of short oblique indentations, forming a leaf-band pattern.

Examples:

Type A

1 Copenhagen ABc 94, from Tunisia; *CVA Copenhague* 7, pl. 305.6; Pallarés (1960) 280 (with profile). H. 9·0. Two rows of circular indentations on belly, between grooves.

2 Copenhagen ABc 668, from Tunisia (unpublished). Similar size. One row of circular indentations on belly, flanked by two lines of rouletting above and two below. Accidentally burnt: clay black, with slip flaking.

Type B

3 Leiden H III Z 46, Tunisia; Holwerda no. 669, fig. 16. H. 9·7. Rather thick ware with good slip. PLATE V*a*.

4 Ventimiglia; Lamboglia (1941) 13; *id.* (1958) 282, form 14. H. *c.* 10·0. High rim.

The successor of Form 135, etc.; Form 138.3 may be regarded as a transitional piece. Type B is probably later than any of the other mug-forms listed above; its decoration recalls the white-painted leaf-bands found on a series of plain-ware mugs of late second- to early third-century date which occur on numerous sites in Italy and Greece.[1]

Probable dates: Type A—mid second century or earlier.
Type B—late second to early third century.

FORM 141: vacant

FORMS 142–144

Various semi-closed forms with slip on the outside only; early fabric

FORM 142

Indented bowl. Curved wall with plain rim; flat base with low moulding; indentations on lower part of wall. Thin-walled ware.

One example only:

*1 Louvre, uncat. (ex Coll. Marchant). D. 14·5, H. 7·3. Three indentations. Two fine grooves below rim, two grooves under edge of base.

Date uncertain but probably early (late first century?). For a possibly related form in Italian thin-walled ware, see Robinson (1959) pl. 63, G 42 (context Flavian).

FORM 143

Pallarés 33.

Beaker with stamped decoration. Conical, with low foot. Thin-walled. Two or three lines of small stamps on wall, alternating with bands of rouletting and flanked by grooves or small cordons.

Examples:

1 Copenhagen ABc 603, from Tunisia; *CVA Copenhague* 7, pl. 306.1; Pallarés (1960) 286–7 (with profile). D. 10·1, H. 8·8. Two rows of small lozenge-shaped stamps on wall, flanking a recessed convex band bearing a line of rouletting; a groove and a second line of rouletting above, two small cordons below; small moulding at rim.

2 Copenhagen ABc 604, from Tunisia; *CVA Copenhague* 7, pl. 306.2; Pallarés, *loc. cit.* (profile). D. 8·2, H. 7·5. More carinated form, with only slight foot. On wall, two rows of small *planta pedis* stamps, with four lines of rouletting between them; double convex moulding at rim, small cordon at base of wall.

3 Tunis, Bardo, from el-Djem region; *BAC,* 1914, CCI–CCII. H. 7. Three rows of stamped lozenges on wall, separated by cordons(?).

[1] For examples with this decoration, see Holwerda no. 761, fig. 19 (from Smyrna region), and *NSc* 1965, 334, fig. 9 (from Porto Torres, Sardinia); also the unpublished piece Saloniki 3799.

For a similar shape in glassware, see Isings form 21, dated late first–early second century.[1] The shape of **2** may be influenced by the Gaulish form Drag. 30. For similar stamps, see the *planta pedis* stamps on Form 5 and Form 3. 112.
Probable date: Flavian–Trajanic.

FORM 144

Two-handled beaker. Gently flaring sides, with slight curve; slight rim, low splaying foot; handles from rim to belly. Rouletting or grooves on upper part. Two grooves on handles.

Examples:

1 Leiden HNN 174, from Ksour es-Saf; Holwerda no. 676, fig. 16. H. 8·6. Two lines of rouletting on body, with grooves above and below. PLATE V*b*.

2 Tunis, Bardo, from el-Djem region; *BAC*, 1914, CCI. H. 8·8. Glossy slip. Two grooves below rim.

Variant

3 Ostia 16067. H. pres. 8·1 (originally 9+). Base and one side only. Body has slight S-curve; base flat, without moulding. Slip glossy; none under base. Two bands of 3–4 lines of rouletting on upper part, with two grooves below.

The fine slip and rouletted decoration of these pieces suggest a late first- or early second-century date.

FORM 145

Two-handled bowl with stemmed foot. Round-bodied, with slight shoulder and small rim-moulding; stemmed foot, flaring at bottom. Small mould-made handles with relief decoration attached to body. Fine thin fabric with smooth glossy slip on outside. Appliqué decoration on body: a figured motif at centre of each side, flanked by vertical motifs.

One example only:

1 Carthage, Lavigerie; Salomonson (1968) Tabl. II, XXV. D. 11·9, H. *c.* 10·6. Decoration: mask (applied upside-down); boar r.; each flanked by vertical palm-branches. Handles: leaf-band, with 'foot' at bottom.

Belongs to the same series as Forms 171–179 below.

Suggested date: first half of third century.

[1] C. Isings, *Roman Glass from Dated Finds* (Groningen, 1957) 37–38.

FORM 146

Flanged lid, of shallow domed shape, with flat solid knob. As Form 20, but simplified, with short rim. Appliqué decoration round top. Fine fabric, with slip on top only. Presumably the lid of a bowl as Form 37 or Form 145. Rare.

Examples: Salomonson (1968) Tabl. II, XXII; Cyprus Museum D. 19 1935 (fr. from Dhenia(?)). Toynbee (1957) pl. IV. 1 is related, but has an inverted foot-ring in place of the knob.

Date: about first half of third century (and possibly later).

FORM 147

Lamboglia 13.

Pilgrim-flask. Flat circular body, lentoid in cross-section, made of two wheel-made sections luted together; a short wheel-made neck and two handles attached to edge. Neck short and narrow, with flaring mouth, generally bell-shaped; handles angular, grooved. Sometimes lines of rouletting or a groove round body (same on both sides).

Examples:

1 Rabat Museum, Malta. D. of body *c.* 17·6. Rounded bulging mouth with a small lip-moulding. Three grooves on handles. Two lines of rouletting enclosing a groove round edge of body. Rather fine fabric.

2 Cuneo, Mus. Civico, from Pollenzo; Lamboglia (1958) 280–1. D. of body *c.* 12·2, H. *c.* 15·7. Plain flaring rim. Handles ungrooved. Several lines of spiral rouletting round body.

3 New York, Hispanic Soc. of America E 307, from Osuna (near Seville); Frothingham, *Sigillate Pottery* (New York, 1937) 29–30, pl. XVIII; *Hispanic Society of America: Handbook* (1938) 110; Charleston (1955), pl. 26. D. of body 14·0, H. 17·9. Sharply flaring bell-shaped mouth; S-shaped handles with two grooves. A groove round body. Normal fabric.[1] PLATE V*c*.

4 Leiden HKK 5, from Sfax; Holwerda no. 686, fig. 16. D. of body 12·0, H. 13·7. Mouth cut down (by potter). Two sets of two grooves on body, with groove-like offset round edge.

5 British Museum, Egyptian Dept. 36017.[2] D. of body 10·8. Neck and handles missing. A groove round body.

6 Marseille, Musée Borély 3209, from near Arles; Lamboglia (1958) 280–1. D. of body *c.* 11·5, H. *c.* 14·6. Funnel-shaped mouth; one handle only(?), bearing one groove. Undecorated.

7 Louvre, uncat. D. of body 10·4. Body and stumps of handles only. Two grooves on handles. Undecorated.

Date and development uncertain. The rouletting on **1–2** suggests a late first- to early second-century date; the rest may be later. Perhaps modelled on the Gaulish T.S. form Hermet 13 (F. Hermet, *La Graufesenque* (1934) 8, pl. 4, form 13), though this bears relief decoration.

[1] Not Gaulish ware, as is claimed by Frothingham. Charleston's identification should be likewise modified.
[2] From old collections, not necessarily from Egypt.

FORM 148

Patera with saucepan-handle. One fr. appears to belong to a vessel of this shape:

1 Ostia 16068. Part of a handle of flattened section; L. pr. 11·2, W. *c.* 3·3. Upper surface bears mould-made relief decoration: shallow fluting, with a flattened lion's head at end; small 'rosette' and some cross-grooves at junction of the two. Underside flat, undecorated. Good-quality ware with normal slip; a few small clay bubbles on the decorated surface suggest use of a plaster mould.

Presumably a copy of the series of metalware paterae with fluted handles terminating in animal-heads.

Date: probably late first to early second century, as the metalware type.

FORMS 149–150: vacant

FORMS 151–160: Jugs

Slip on outside only. Bases flat, with low external moulding. Handles as on Forms 131–140. Early fabric. All these Forms are uncommon, and rarely found outside Tunisia, with the exception of Form 160. Several seem to be copies of metalware shapes.

FORM 151

Slender curving form with narrow mouth, flat-rimmed. Angular handle from rim to belly, with 'rat-tail' at bottom; ungrooved. Slight knob-like projections on rim flanking handle. Undecorated.

One example only:

1 Fogg Art Museum, Harvard, Classical Coll. 321, from Torre Iacova (E. of Rome). H. 19·1, D. of belly 12·3. PLATE VI*a*.

Probably very early, imitating a metalware shape. The knobs on the rim and the ungrooved handle are distinctive features. Late first century?

FORM 152

Curving form with wider mouth; rim slightly outcurved, with small upward hook at lip; curving handle from rim to belly. Undecorated.

One example only:

1 Tripoli Mus. (Libya), from Mdeina Doga (1950). H. 13·1. Three grooves on handle.

The form is very close to one occurring in silverware in the Casa del Menandro hoard at Pompeii;[1] a Flavian date is therefore probable.

[1] Maiuri, *La Casa del Menandro e il suo tesoro di argenteria* (Rome, 1933) pl. LII; Strong (1966) fig. 28a.

FORM 153

Small, broad-bellied type with concave neck and flaring rim, slightly rolled; grooved handle on body. Undecorated.

One example only:

1 British Museum W.T. 558 (ex Temple coll.), said to be from Torre Annunziata. H. 12·0. Rather fine fabric, with glossy slip. Two grooves on handle. PLATE VI *b*.

Early, as the preceding forms. The findspot suggests a possible connection with Pompeii and the events of A.D. 79; such a date is by no means implausible.

FORM 154

Spouted jug, with ovoid body and short flaring rim joining it at an angle. Rather angular handle from rim to above belly, rising above rim and pressed into lip at upper end. Open spout of semicircular section with heavy moulded lip rising obliquely from rim opposite handle. Undecorated.

One example only:

1 New York, Metropolitan Museum, 17.194.864 (ex Gréau coll.), from Arles; *Coll. Julien Gréau* pl. CCCXLV, 7. H. (to rim) 11·8, D. of belly 7·4, L. of spout 2·5. Thin-walled, with finely polished dark red slip, flaking in places. Three grooves on handle. PLATE VI *c*.

Date: probably late first century; a similar type occurs in bronze at Pompeii.[1]

FORM 155

Pallarés 30A.

Rather slender curving form with trefoil rim; handle from rim to belly. Cf. Form 152.

One example only:

1 Copenhagen ABc 681; *CVA Copenhague* 7, pl. 305.8; Pallarés (1960) 285–6 (with profile). H. 13·6. Handle missing. Two grooves mark off neck from body.

Date uncertain, probably early.

FORM 156

Broad low biconical form, with narrow neck ending in a trefoil rim. Handle from rim to shoulder. Rouletted decoration.

One example only:

1 Leiden HA 15; Holwerda no. 680, fig. 16. H. 12·1. Handle missing. Two fine grooves on neck. Two bands of two lines of rouletting on shoulder. PLATE VII *a*.

Date uncertain; probably as mugs such as Forms 135–136.

[1] Cf. Naples 69142, illustrated in *Catalogue illustré de Sabatino De Angelis & Fils, Naples* (Naples, 1900), 147.

FORM 157

Pallarés 30C.

Round-bellied, with broad concave neck, and flat-topped rim with double moulding. Rouletted decoration.

One example only:

1 Copenhagen ABc 188; *CVA Copenhague* 7, pl. 305.3; Pallarés (1960) 285–6 (with profile). H. 12·3. Handle missing. Three lines of rouletting and a small groove just above belly. Slight ridge at junction of body and neck.

Date uncertain, probably early second century.

FORM 158

Lamboglia 12, Salomonson A 13.

Globular body, with tubular neck and downturned rim. Handle from neck to belly. Rouletted decoration. Generally small-sized.

Examples:

1 Marseille, Musée Borély 3214, probably from near Arles; Lamboglia (1958) 280, form 12. H. *c.* 10·6. Two grooves on handle. Three lines of rouletting on upper part of body.

2–4 Carthage, Lavigerie. Three examples, similar to **1**.

5 Rome, Museo Africano 5160, from Germa (Fezzan), 'necropoli del Mausoleo' tomb X; Caputo, *Mon. Ant.* xli (1951) 330, figs. 119–120. H. pr. 10·2. Neck and handle missing; almost certainly this form. Lines of rouletting on upper part of body.

6 Leiden HG 12, from Sbeitla; Holwerda no. 681, fig. 16. H. 10·4. Low foot. Poor slip, badly worn. One line of faint rouletting on shoulder. Perhaps a local imitation. PLATE VII*b*.

See also Salomonson (1968) pp. 104–5, fig. 20.1.

Larger variants

7 Carthage, Lavigerie. H. *c.* 19·2. Base-moulding incorporates a low foot (cf. Form 171 ff.). Angular, slightly peaked handle of strap-like shape, bearing five grooves. Three sets of two lines of rouletting on body.

8–9 Sassari, Mus. Naz., Coll. Sanna 240–241; Lamboglia (1958) 280. Perhaps similar.

Perhaps also

10 Cherchel; *Bull. soc. géog. et arch. d'Oran* x (1890) 263, fig. in text. Two sets of two lines of rouletting on body.

No. **5** was found together with two lamps stamped IVNI ALEXI (about mid-late second century). Lamboglia would date the form about Antonine–Severan; the former seems the more likely.

Suggested date: mid–late second century.

FORM 159

Lamboglia 11A.

Broad body with double bulge (cf. Form 160), narrow neck with high bell-shaped rim; mouldings at lip, base of rim and base of neck; high-flaring grooved handle from neck to shoulder. Undecorated.

One example only:

1 Marseille, Musée Borély 3206; Lamboglia (1958) 278–9, form 11A. H. *c.* 15·5. One groove on handle.

Date uncertain; related to Form 160.

FORM 160

Lamboglia 11.

Body of double-convex shape, the upper bulge smaller than the lower; tall screw-neck (lower part vertical and plain, upper part contracted, bearing spiral grooving), with slightly flaring mouth; flat base with rather high moulding at edge. High-flaring handle from lower part of neck to edge of shoulder, with a single central groove. Fabric generally rather coarser than that of the preceding forms.
Not uncommon.

Examples:

1 British Museum MSC. 2181 (ex Towneley Coll.). H. 16·8. Good slip. PLATE VII *c*.

2 London Museum, Layton Coll. P 830. H. 16·3. Rather broad-bodied (cf. 7) with low base-moulding. Thin fabric.

3 Tunis, Bardo, from el-Aouja. H. *c.* 12·5.

4 Tunis, Bardo (ex Houdart Coll.). H. *c.* 13·5.

5 Genova-Pegli, Mus. Civico 1075; *CVA Genova-Pegli 1*, IV Bf, pl. 1.7; Lamboglia (1958) 278–9. H. 12·8.

6 Genova-Pegli, Mus. Civico 1556, from Libarna. The piece is visible in *Forma Italiae: Libarna*, fig. 42 (second row down, second from right).

7–9 Vado; Lamboglia, *Riv. Ing. Intem.* (= *Riv. st. lig.*) vii (1941) 23–27; Lamboglia, *Vado Romana* (Bordighera, 1940) 14, fig. 7 e; *id.* (1958) 278–279. Three examples from a single tomb.

10 Pollentia (Majorca), Can Fanals cemetery; *Ampurias* xv–xvi (1953–54) 255, fig. 11, no. 2; Lamboglia (1958) 278. H. 11.

11–12 Ibiza, from Sant Antoni (Portus Magnus); Román y Calvet (1906)[1] 250, pl. LXXII, 1–2. H. *c.* 11·5, 11·6.

13 Ibiza, from Sant Antoni, Can Prats cemetery; *Ampurias* iv (1942) 143, pl. II, 9. (Possibly an imitation.)

14 Barcelona 7528; Adroer (1963) 121. Est. H. *c.* 13·5; fragmentary.

15 Ostia; ref. Lamboglia (1958) 278.

16 Formerly Coll. Farges, Constantine, from Tebessa; Besnier and Blanchet, *Collection Farges* 14, no. 13. H. 15·5. The published description clearly indicates a vessel of this form.

[1] See Appendix 1.

17 Toronto 910x156.15. H. 15·9. Broad body (as **7**). Bright slip.

18 Argyruntum (Dalmatia), grave 319; Colnago, *JÖAI* xviii (1915), Beiblatt 180, fig. 92. H. 13. (Probably this ware.)

19 Valencia, Mus. Arq. (ex Pérez Cabrero coll.), from Ibiza; Lamboglia (1958) 278–279. H. *c.* 14·2. Slender variant. (Possibly same as one of **11–13** above.)

Broad-bodied examples (as **2**, **7**, **17**) may be early in the series, slender ones (as **19**) late.

The Vado pieces **7–9** come from a context of the second half of the second century. No. **13** was found in a cemetery which produced third-century coins; **10** comes from a largely second-century cemetery. **18** was found in association with a coin of Trajan. The rest do not come from dated contexts. The Antonine–Severan dating proposed by Lamboglia would seem to be correct.

FORMS 161–164: Two-handled flagons

General features as for Forms 151–160; rare

FORM 161

Pallarés 30B.

Curving form (cf. Forms 152, 155) without a pronounced rim; handles from below rim to top of belly, with 'rat-tails' below.

Two examples only, differing slightly:

*1 Naples Mus. Naz. 110388, from Pompeii. H. 21·3. Rim plain with slight inward hook at lip. Handles ungrooved, of convex section. Glossy slip, with tendency to flake at surface.

2 Copenhagen ABc 660; *CVA Copenhague* 7, pl. 305.9; Pallarés (1960) 285–6, form 30B (with profile). H. 13·8. Handles missing ('rat-tails' preserved). Flat-topped rim with slight external moulding; a small cordon just below rim. Neck rather longer than on **1**.

No. **1** is more or less an exact copy of a type of bronze flagon common at Pompeii.[1] It is the only example of the ware from Pompeii, and the earliest dated piece from Italy (*terminus ante quem:* A.D. 79). **2** may be presumed to be of similar date.

FORM 162

Lamboglia 26a.

Sagging curved form with flaring rim; handles as on Form 161, grooved.

One example only:

1 Barcelona, from Ampurias (1912 excavations, no. 1122); Lamboglia (1958) 293–4. H. *c.* 14·6. Slight groove below lip. Two grooves on handle.

[1] Cf. also P. La Baume, *Römisches Kunstgewerbe* (Braunschweig 1964) 49, fig. 38. Parallel shape in glass: Isings form 15 (*op. cit.* 32–34).

Probably not much later than Form 161. Perhaps related to a series of green-glazed and plain-ware vessels with cup-shaped rims found on Italian sites;[1] these date from the latter part of the first century.

Suggested date: late first or early second century.

FORM 163

Salomonson A 7.

Broad low body with wide shoulder; tubular neck with funnel-shaped rim; low foot. Two broad strap-like handles from junction of neck and rim to edge of shoulder. Undecorated.

Examples:

1 Tunis, Bardo, from el-Aouja. H. *c.* 16·5. Five ridges on handles. Normal fabric.
2 Same. H. 20. Similar.
3 Raqqada tomb B 26; Salomonson (1968) 101 figs. 8a, 16.3. Similar.

The broad strap-like handles, similar to those on the larger pieces of Form 158, suggest a date around the first half of the third century. **3** was found in association with an example of Form 50.

Probable date: early–mid third century.

FORM 164

Ovoid body, with offset concave neck and heavy moulded rim; high base-moulding incorporating a low foot. Undecorated.

Example:

1 Tunis, Bardo, from el-Aouja. H. *c.* 19·5. Normal fabric. Mould-made handles, with relief herringbone pattern.
A second piece similar (Tunis, Bardo).

For the handle-decoration, cf. Forms 171 ff.

Probable date: first half of third century.

FORM 165

Salomonson (1968, Tabl. II) XIV.

Two-handled flagon. Ovoid body with broad flat base; high bulging neck with small moulding at rim. Handles from neck to body. mould-made, with indistinct decoration. One groove under edge of base. Rather fine fabric with darkish slip, related to that of Forms 171–179 and Form 45. For the shape, cf. Form 172.

Examples:

1 Tunis, Bardo, from el-Aouja. Convex neck.
A second example similar, in same museum.

[1] Examples: Walters (1908) K 17 (green-glazed); *Annali dell' Inst. corr. arch.* liv (1882) 57, D, pl. D, 1 (green-glazed); Baur, *Cat. Stoddard Coll.* no. 554 (plain). Cf. Sutri form 29 (*PBSR* xxxii (1964) 61–62, fig. 12).

2 Louvre CA 2809, from Sousse. H. 21·9. Similar, but with plain handles. Inferior fabric. Slip ends just above base.

3 Sousse Museum. Lower part of neck concave, with a vertical collar above.

Date: presumably third century.

Related: Salomonson (1968) 108, form A 26, fig. 12.

FORMS 166–169: vacant

FORM 170

Stemmed goblet. High ridged stem, supporting a small bowl with slightly incurved sides; broad flat base supported on a low ledge-foot running round the edge. Stem solid.

One example only:

1 Leiden K. 1931/6 28, bought in Marseille (probably from N. Africa); W.C. Braat, 'Ein merkwürdiger Sigillata-Becher im Rijksmuseum van Oudheden zu Leiden', *Germania* xxii (1938) 255, fig. 1. H. 13·8, D. of rim 7·2, of base 9·4. Two grooves under rim; small offset at base of stem; slight mouldings above edge of base; two grooves on underside (one round centre, one close to foot). Rather thick fabric. Fairly fine-grained clay; thick bright orange-red slip all over (similar to that of the early series and that of the sixth-century forms). PLATE XX.

The date of this piece is not at all clear. As noted by Braat, the shape is fairly closely paralleled in silverware in the Traprain hoard;[1] to this may now be added the two Mildenhall goblets,[2] which, though rather different in other respects, provide models for the distinctive treatment of the base. These suggest a date around 400 for the Leiden piece; however, the fabric is not typical of the other African products of this period. Nor is it generally matched in the late third–early fourth century, the date suggested for it by Braat. The fact that the slip covers the whole of the vessel might suggest an early date (its appearance is, admittedly, not unlike that of second-century products); however, this should perhaps not be taken as decisive in view of the abnormal shape of the piece. If we disregard this factor, the closest parallels for the rather thick-walled fine-grained ware, with its thick bright slip, would seem to be found in such late fifth-century products as Forms 80–81. The Leiden goblet may therefore be a successor of the Traprain and Mildenhall silver goblets, dating perhaps from the second half of the fifth century or the early years of the sixth century.

[1] Curle (1923) 28 ff., nos. 13–18, pl. XIII.

[2] *The Mildenhall Treasure: A Handbook* (2nd ed. 1955) nos. 16–17, pl. 7.

FORMS 171–179

Jugs, flagons and flasks with appliqué decoration

The counterparts of the bowls Forms 36–41. Fine thin-walled ware, carefully smoothed, with glossy slip (in some cases rivalling the gloss surface of Gaulish T.S.). Sharply articulated, often with small cordons at junctions. Bases in most cases have a high external moulding, incorporating a small ledge-foot at bottom. Handles mouldmade, pressed into body at top, applied at bottom, bearing relief decoration (normally a leaf-spray, with a stylized foot at the lower end). Several appliqués spaced out round body, normally in the form of figured motifs framed by vertical dividing-ornaments, occasionally incorporating small mottoes.

A few undecorated examples are found. Vessels of this series are common on Tunisian sites, rare elsewhere.

For the decorative motifs, see pp. 212–13 below. For full details of published pieces, see original publications. A full range of forms (including some not listed here) is illustrated by Salomonson (1968, Tabl. II); the type-numbers in roman numerals which follow refer to this.

FORM 171

Salomonson I.

Small piriform jug. Narrow-mouthed, with small rim-moulding; body low-bellied, more or less elongated; base of type described above. Handle on body, rather low-set. Groove(s) or small cordon(s) on body a short distance below rim. Decoration: normally two figured motifs alternating with three vertical palm-branches (or some similar dividing-motif). On some of the more elongated examples, narrow band of subsidiary decoration below rim.

Size-range: H. *c.* 10·5–19. Common.

Examples:[1]

1–8 Tunis, Bardo, from el-Djem; *Cat. Alaoui* (1922) 311–2, nos. 1162–9. H. 11–19. For individual pieces, see also Merlin, *BAC* 1910, CCX–CCXI (3 examples); *id.* 1912, CCXVI; *id.* 1916, CXXVI–CXXVII, no. 4, pl. XXX.

9–17 Tunis, Bardo, from el-Aouja; *Cat. Alaoui* (1922) 313–4, nos. 1172–80. H. *c.* 10·5–17. Individual pieces: Merlin, *BAC* 1914, CXLIX–CL, nos. 1–2, and CXCIX–CC, nos. 1–2; *id.* 1916, CXXV–CXXVI, nos. 1–3, pls. XXVIII, XXIX; *Tunisian Exhibition* no. 51, fig. h (American ed., no. 56); Salomonson (1969) fig. 90.

18 Louvre AO 6637, from el-Aouja. H. 16·3. Two cordons below rim. Decoration: standing man, about to deliver a blow(?); lion leaping l.; three oak-branch dividers. Handle: leaf-spray.

19 Louvre AO 6638, from el-Aouja. H. 15·9. Two grooves below rim. Decoration: goat running r.; lion l., attacking another animal (mould worn); above each a gable-shaped diadem. Three small columns with two-tier volute-capitals. Handle: leaf-spray.

[1] Catalogue order of Tunis (Bardo) pieces follows that in *Cat. Alaoui* (1897) (1910) (1922).

20–21 Tunis, Bardo, from Sousse; *Cat. Alaoui* (1897) 236, pl. XLII, nos. 209–210; Déchelette ii 175–6, figs. c, d. **21** rather squat (H. 12·2).

22 Louvre CA 2805, from Sousse; *BAC* 1902, p. 414, no. 17.

23–24 Sousse; *BAC* 1902, CCIX–CCX, nos. 1–2. For **23** see also *Mém. soc. antiq. France,* 1902, p. 237.

25 Sousse Mus. Decoration: elephant l., with diadem above (second motif uncertain); three small columns. Large rosettes in band below rim. Probably same vessel as Foucher, *Africa* ii (1967–68) 221, no. 34, pl. IX, 29 (from el-Djem), with a boar below a diadem.

26 Sousse Mus. (*ibid.* no. 33?). Decoration: wreath with three spikes (second motif uncertain); three palm-branch dividers.

27 Sousse Mus.; Foucher, *loc. cit.* no. 32, pl. IX. 30. H. 12·5. Broad form; fine fabric. Decoration: hunter with boar on shoulder (second motif uncertain); diadems above; three oak-sprays. Small animals in band below rim.

28 Louvre AO 6564, from between Sousse and Kairouan; *CRAI* 1913, p. 443, fig. 3 left. H. 14·5. Rim cut down by potter to just above cordon on body. Decoration: hunter r., with levelled spear; nude figure l., reclining on a sea-monster; three palm-branch dividers; diadems above figures. Handle: leaf-spray with double stem.

29–30 Tunis, Bardo, from same general region as the above; Merlin, *BAC* 1913, CCXVII–CCXVIII (two examples); *Cat. Alaoui* (1922) 312, nos. 1170–1.

31–32 Hadjeb el-Aioun; Godin, *BAC* 1905, pp. 276–7 (two examples).

33 Bled-Maknassy; Gouvet, *BAC* 1905, p. 113.

34–38 Carthage, Lavigerie. Five complete examples, all decorated.

39 Trier, Rheinisches Landesmuseum EV 1943.22, from St. Matthias cemetery. H. 15·3. Two ridges below rim. Decoration: nude figure walking l., with shepherd's crook(?); lozenge with rosette; diadem above each. Three palm-branches (with cluster of fruit at top) as dividers. Plate VIII.

40 Yale 1913.547, said to be from Rhodes; Baur, *Cat. Stoddard Coll.* 254, figs. 109–110, no. 547. H. 15·5.

41 New York, Metropolitan Mus., from Cyprus (Cesnola coll.); Myres, *Handbook of the Cesnola Collection* (1914) 120, no. 985 (ref.); *SCE* iv. 3, p. 71, fig. 32.3. H. *c.* 15·5.

42 Provenance and location unknown; Bachofen, *Römische Grablampen* pl. XXXV.1 and ?2 (no accompanying text). Decoration: Leda and Swan; apparently coupled with an erotic scene involving Pan and a maenad.

(43 Tunis, Bardo, from Kairouan area; Poinssot and Lantier, *BAC* 1923, XLI, *c*. H. 21. Apparently this form.)

With inscriptions

44 Tunis, Bardo, from el-Djem; Merlin, *BAC* 1914, CLII–CLIII; *Cat. Alaoui* (1922) 321, no. 1224; Salomonson (1960) 51, fig. 22a–b. H. 13·4. Rather low broad form. Decoration in single field, flanked by two

palm-branches: *venatio* scenes, with motto SINEMATI NIKA. Shell-motifs in narrow band below rim.

45 Tunis, Bardo, from el-Aouja; Merlin, *BAC* 1915, CLXXVIII, b; *Cat. Alaoui* (1922) 321, no. 1227, pl. XIX. 5; Salomonson (1960) 51, fig. 21a–b; *Tunisian Exhibition* no. 52, fig. i.[1] H. 17·4. Slender and elongated. Decorative scheme as **44** (but with columns at sides), with motto TAVRISCI NIKA. Handle: triple leaf-band bordered by strokes.

46 Copenhagen Chr. VIII 376, from near Thapsus; C.T. Falbe, *Recherches sur l'emplacement de Carthage* (Paris, 1833) 128–9, pl. V.1; *CVA Copenhague* 7, pl. 300.1 (with further refs.); ref. Salomonson (1960) 50. H. 18·0. Similar to **44**, with motto TELEGENI NIKA.

47 Tunis, Bardo (ex Houdart Coll.), from Tunisia; Salomonson (1960) 51, fig. 20a–b. H. pr. 16·2 (rim broken off). Fairly slender form. Normal scheme: in one panel, venator with bear and venator with bull (the same stamps occur on **46**); in the other, wreath and motto PENTASI NIKA; three oak-branch dividers.

Broad squat variant form

48 Tunis, Bardo, from el-Aouja; Merlin, *BAC* 1914, CC, no. 3; *Cat. Alaoui* (1922) 314, no. 1181; Salomonson (1960) 52, figs. 23–24; *Tunisian Exhibition* no. 53, fig. j.[2] H. 11·7, D. of belly 8·5. Rather glossy slip. Broad mouth. One groove below rim. Decoration: five small appliqués in a row round body (cast taken from a coin,[3] hare at rest r., bearded mask frontal, boar charging l., flower). Handle: leaf-spray (roughly executed).

Undecorated

49 Leiden I 1924/2.12, from Tunisia; Holwerda no. 679, pl. VI. H. 16·7. Thinnish rather granular ware with pimply surfaces; glossy slip (dull under base). Two grooves below rim, flat base. Strap-like handle with three grooves. PLATE VII*d*.

50 Louvre CA 2806, from Sousse. H. 15·2. Slip rather dull. One groove below rim. Handle of normal type, with leaf-spray.

*51 Corinth CP 407. H. 9·7. One side missing; no trace of handle, but probably existed. Fine ware. Two small cordons on lower part of body (cf. Form 35·1, Form 37·1), underside of foot grooved.

FORM 172

Salomonson VIII.

Small two-handled flagon. Globular body with long tapering neck; small rim-moulding; base as on Form 171. Two S-curved handles from lower part of neck to body. Two grooves on upper part of neck. Decoration: on each side, one or two figured motifs flanked by two vertical palm-branches or the like.
Size-range: H. *c.* 11·5–18. Common.

[1] American ed., no. 57.
[2] American ed., no. 58.
[3] See discussion below, p. 199.

Examples:

1–2 Tunis, Bardo, from el-Djem region; *Cat. Alaoui* (1922) 307–8, nos. 1140–1. H. 12·4, 13. For **1** see also Merlin, *BAC* 1914, CLII; *Tunisian Exhibition* no. 56, fig. m[1] (fine fabric).

3–11 Tunis, Bardo, from el-Aouja; *Cat. Alaoui* (1922) 308–9, nos. 1142–4, 1146–51. H. *c.* 11·5 (=**11**) and 14–17·5. Individual pieces: Merlin, *BAC* 1914, CL, nos. 3–4; *id.* 1916, CXXVIII, nos. 7–9.

12 Louvre AO 6635, from el-Aouja. H. 17·0. One neck groove. Decoration: eagle r. with spread wings; forepart of boar hanging l.; palm-branches to sides. Handles: leaf-sprays, with rows of dots between the leaves.

13 Louvre AO 6636, from el-Aouja; Salomonson (1969) fig. 110. H. 15·0. Decoration: Bacchus or satyr standing l., holding thyrsus; branch-like motif with two fish(?) hanging from it; oak-sprays(?) to sides. Handles: leaf-sprays. PLATE IX*a*.

14–15 Tunis, Bardo, from Kairouan area; Poinssot and Lantier, *BAC* 1923, XLI, pieces a and b.

16 Berlin 31149, from Kairouan area; Neugebauer, *Führer durch das Antiquarium* ii 209.

17–18 Tunis, Bardo, from Sousse; *Cat. Alaoui* (1897) 236, pl. XLII, nos. 206–207; for **17** see also Déchelette ii 175, fig. b.

19 Bled-Maknassy; Gouvet, *BAC* 1905, p. 113.

20 Tunis, Bardo, from Bulla Regia; *Cat. Alaoui* (1897) 236, no. 208; Déchelette ii 175.

21 Tunis, Bardo (ex Houdart Coll.), from Tunisia; Salomonson (1960) 53, fig. 26a–b. H. 11·9 only.

22 Tripoli Mus. (Libya), from W. suburbs of city (Giorgimpopoli, found 1960); Salomonson (1969) 80, fig. 109. H. 13·0. Decoration: boar charging l.; leopard leaping l. (head frontal); to sides, spirally fluted columns with basket-capitals. Handles: leaf-sprays.

23 Bonn, Rheinisches Landesmuseum, from Gelsdorf; O. Jahn, *Rheinlande Jahrbücher* (=*BJ*) xxxiii–xxxiv (1863) 229–231, pl. III.2; Déchelette ii 176–7, fig. e.

24 Saloniki 3571, from cemeteries. H. 17·0. Decoration: panther attacking venator; cupid with purse, running l.; to sides, vertical scrollwork motifs. Handles: leaf-sprays.

Also: Salomonson (1968) fig. 26.

With inscriptions

25 Tunis, Bardo, from el-Aouja; Merlin, *BAC* 1915, CLXXVII, a; *Cat. Alaoui* (1922) 321–2, no. 1228; Salomonson (1960) 50, fig. 19a–b. H. 14·1. On one side, emblem with inscription TELE below.

26 Louvre AO 6634, from el-Aouja. H. 18·1. Rather poor fabric, with brownish slip (as ware of later examples of Form 45); appliqués from worn moulds. Decoration: *tabula ansata* with motto PENTASI NIKA;

[1] American ed., no. 61.

lion leaping l.; palm-branches to sides. Handles: poorly moulded leaf-sprays.

Undecorated

27 Tunis, Bardo, from el-Aouja.

FORM 173

Salomonson IX, X.

Small two-handled flagon, as Form 172, but with a tall neck composed of a tubular spout with spiral grooving set upon a broader plain lower section, with a disc between. Handles attached to lower part of neck. Rare.

Examples:

1 Louvre AO 6617, from el-Djem. H. 17·0. Tall narrow spout. Decoration: on each side, a lion running l., chasing a dog, with a fluted column with double-tier volute capital between them, and two diadems in field above. Handles: leaf-sprays. PLATE IX*b*.

2 Tunis, Bardo, from el-Aouja; Merlin, *BAC* 1916, CXXVIII, no. 10, pl. XXXI; *Cat. Alaoui* (1922) 308, no. 1145. H. 16. Short spout. Decorative scheme as on Form 172.

Cf. also Berlin 31150; Neugebauer, *Führer* ii 209. H. 21.

FORM 174

Salomonson III.

Jug. Broad-bellied, with slight shoulder; long neck, bearing a disc on upper part; low simple foot of rather wide diameter. Handle from lower part of neck to shoulder. Sometimes small offsets or grooves at base of neck and grooves on neck below disc. Decorative scheme similar to that of Form 171, with two main motifs alternating with three vertical dividing-ornaments. Often two bands of decoration on handle. Size-range: H. 16·3–24·5. Common.

Examples:

1–6 Tunis, Bardo, from el-Aouja; *Cat. Alaoui* (1922) 314–5, nos. 1184–9. H. *c.* 16·5–24·5. Individual pieces: Merlin, *BAC* 1914, CL–CLI, nos. 5–7, and CC–CCI, nos. 4–5; *id.* 1916, CXXVII, no. 5. **4**: Salomonson (1960) 54, fig. 27a–b; *Tunisian Exhibition* no. 54,[1] fig. k (ware less fine than **7**). **5**: Salomonson (1969) fig. 108.

7 Tunis, Bardo, from Hadjeb el-Aioun; *Cat. Alaoui* (1910) 316, no. 724; *Tunisian Exhibition* no. 55,[2] fig. l. H. 16·3. Very thin and fine; high gloss. Handle does not belong.

8–10 Tunis, Bardo (**8** from Sousse, **9** from Hadjeb el-Aioun, **10** without provenance); *Cat. Alaoui* (1910) 316, nos. 723, 725–6. Apparently this form.

11 Louvre AO 6563, from between Sousse and Kairouan; *CRAI* 1913, p. 443, fig. 3 right; Salomonson (1969) fig. 111. H. 21·6. Decoration: three figures standing r. before an altar; cupid l. before an altar, holding a knife upright on it; three tree-stumps. Handle: two parallel leaf-sprays, with a ridge between; palmette at bottom. PLATE X*a*.

[1] American ed., no. 59. [2] American ed., no. 60.

12 Sousse Mus.; L. Foucher, *Hadrumetum* (1964) pl. XXXII c; *id.*, *Africa* ii (1967–68) 221, no. 35, pl. IX, 27. H. *c.* 18·5. Decoration: Bacchus or satyr standing l., holding thyrsus, with a diadem above; lion attacking boar; three palm-branch dividers. Handle: two leaf-sprays, with a central ridge.

13–14 Bled-Maknassy; Gouvet, *BAC* 1905, p. 113. Two examples.

15 Sant Antoni, Ibiza; Román y Calvet (1906) 250 pl. LXXVI.

Also: Salomonson (1968) fig. 25.

Undecorated

16 Tunis, Bardo (more than one example).

17 Sousse Museum, from Moureddine; Foucher, *Africa* ii (1967–8) 221, no. 36, pl. IX. 28. Handle: leaf-spray.

18 Carthage, Lavigerie. Rather coarse fabric.

FORM 175

Salomonson XV.

Two-handled vase with wide mouth. Sagging curved body with heavy rim-moulding and low foot; handles from below rim to belly. Decorative scheme as on Form 172. One example only:

1 Yale 1913.546, said to be from Rhodes; Baur, *Cat. Stoddard Coll.* 252, figs. 109–110, no. 546. H. 15·2. PLATE X*b*.

FORM 176

Salomonson IV; cf. XI.

Piriform jug/flagon with cup-shaped mouth. Body-shape similar to Form 171. Handle(s) from junction of mouth and body to belly. Cf. Form 162? Rare. Examples in Tunis, Bardo; both one- and two-handled varieties.

FORM 177

Salomonson II.

Flask, as the broader examples of Form 171 (sagging ovoid body, with small rim-moulding), with a tall tubular neck added on top. Two sets of grooves on neck, slight moulding at lip. No handle. Decorative scheme: three figured motifs (with diadems above), alternating with three vertical palm-branches.

One example only:

1 Tunis, Bardo, from Sousse; *Cat. Alaoui* (1910) 316, no. 722; *Tunisian Exhibition* no. 50, fig. g, pl. 9.[1] H. 22·7. Fairly fine ware.

FORM 178

Small flask. Form as the smaller examples of Form 174, but without a handle.

One example only:

1 Moulins Mus. (Allier) 5–8–34, from Orange(?); Vertet, *Actes du 86e Congrès National des sociétés savantes, Montpellier 1961: section d'archéologie ...*, 49–50, fig. 11. Size not stated. Small cordon on neck below disc. Decoration: boar rushing r., palm-branch, wreath with three spikes, two palm-branches.

[1] American ed., no. 55.

FORM 179

Salomonson XVIII.

Small flask. Globular body with flattened shoulder, low foot; short tubular neck, flaring slightly at mouth.

One decorated example in Musée Lavigerie, Carthage.

For partial studies of this series, see Salomonson (1960) 50–55, and *id.* (1968) 109–113. Most of the available dating-evidence, which is slight, is discussed by him. The Gelsdorf flagon (Form 172.23) came from one of a pair of tombs, apparently of similar date, the finds from which included three silver coins of Severan date, the latest an issue of Iulia Maesa (218–222). The Sousse piece Form 174.12 was found with a coin of Iulia Mammaea (222–35). The other main point of reference is that provided by the coin-impression on Form 171.48, which Salomonson (1960, p. 52) has identified as being taken from a local issue of Tarsus in Cilicia dating from the reign of Gordian III (238–244).[1] This affords at least a *terminus post quem* for the vessel. The state of the appliqué indicates that the coin used was already well worn, so a date for this piece well into the second half of the century seems likely. To these two pieces one may add a few frs. from the Cosa excavations, where a date not later than the 230s seems indicated, and a fr. from the Athenian Agora (P 22672; handle, probably Form 171), found in association with coins running to Etruscilla (249–51).

The great majority of the pieces listed above, of which the dated Gelsdorf flagon is typical, form a more or less uniform group, sharing in many cases the same decorative motifs. The bowls Forms 36–41 also belong to this series. A few pieces, however, may be separated out on account of either their inferior fabric or their decoration; these would seem to be later than the rest. The piece with the coin stamp noted above (Form 171.48) is one example. Another is the flagon Form 172.26, which, to judge by its fabric, may belong to the closing years of the third century; the poor quality of the decoration on this piece may also be noted.

Suggested dates: c. 200/210–250, with a few debased examples of later date (down to *c.* 280/300).

FORM 180

Jug with relief decoration. Slender curving form, with narrow neck and heavy collar-like rim. Handle from base of rim to shoulder. Apparently flat-based. Mould-made relief decoration covers body and neck.

One example only:

1 Syracuse, from a grave at Piazza Armerina; F. Piazza, *Intus . . . Gelenses* (Catania, 1929) 216 ff., with fig. in text; *NSc* 1950, 292–3, fig. 1. H. 24. Handle broken, but apparently round-sectioned. Body divided into nine tall narrow panels by vertical ridges bearing herringbone decoration. In the panels, an assortment of animals (hound, lion, etc.) running upwards, combined with lozenge motifs and small palm-trees; one panel consists merely of five palm-trees arranged one above another.

[1] Rev. type of same series as *BMCat.* (1900) 219–220, nos. 286–289.

On neck, opposite handle, a large cross in crude relief, decorated with impressed dot-and-circle patterns, and flanked below by two lions (one upside-down). On rim above, pattern of impressed dots, possibly to be interpreted as an inverted *alpha.*

A close relative of the late relief-decorated vessels Forms 56 and 89A, and of the African lamp series. The hound visible on the published photograph resembles that on the el-Djem dish Form 56.17, suggesting a date similar to that of the later examples of the dish series. The cross motif is unlikely to be earlier.

Suggested date: early fifth century.

One may note here a unique fragmentary vessel of the same series in the Benaki Museum, Athens (12440, from Alexandria(?)), apparently moulded in the shape of a boot. On the side preserved it bears a venator r. confronting a lion (of types normal on Form 56), with a cordon bearing a row of stamped dot-and-circle motifs above. The rim is pierced, apparently for suspension.

FORMS 181–185

Vessels with burnished slip on one face only

A sub-category of the ware, perhaps better classed among the local African fabrics, but included here since a fair number of examples were exported. Clay similar to that of Form 1, etc., but rather coarser and more gritty; surfaces rough where not polished. Surface apparently coated with a thin slip, and burnished on one face to produce a smooth semi-lustrous finish. Tool-marks normally visible, showing that the burnishing was produced with a small implement in one continuous movement while the vessel was rotated on the wheel ('spiral burnishing'; cf. that of Form 109). Possibly from the region of Ksour es-Saf. Lamboglia's *t.s. chiara A (a strisce)*.[1]

FORM 181

Lamboglia 9A.

Dish with broad flat base and curved wall of roughly quarter-round profile curving inwards a little at rim. Inside burnished to rim; outside wall regularly blackened or otherwise discoloured at surface as a result of irregular firing conditions in kiln (cf. Form 23). Slight groove or offset at junction of floor and wall.
Size-range: D. 21–36. Common.
A series of early variants of smaller size with more flaring walls occur frequently on sites in Tripolitania (see **1** below). Their relationship to the main series is not clear.

Examples:

Early variant

*1 Leiden VDB 78, from Tripoli; Holwerda, no. 711. D. 16·5. Light orange clay with normal impurities; thin red slip on inside and upper part of wall, burnished on inside. Slightly hollowed base.

[1] Lamboglia (1958) 275, 277; Carandini, in *Ostia* i (1969) 31, 46.

Other examples of this type: Holwerda nos. 702–715; also numerous specimens in Tripoli Mus. (some listed and illustrated in S. Aurigemma (1958)).

Normal type

*2 Vatican, Museo Sacro 1328, from S. Sebastiano catacombs, Rome. D. (rim) 32·7. Broad unburnished band round floor, bearing three burnished lines (indicated on profile). Exterior wall blackened.

3–4 Tunis, Bardo (ex Houdart Coll.). Two intact examples.

5–7 Sousse Mus. Three complete examples on display.

8 Tarragona; Lamboglia (1958) 275. D. *c.* 28·5.

9–11 Rome, Palatine (near House of Livia); *NSc* 1967, p. 302, nos. 2a–c, figs. 20, 21, 23. D. 24, *c.* 24·5, 36.

*12 Lepcis Magna, Serapeum C2. Fr.; est. D. 36. Exterior wall blackened.

*13 Corfu, Roman Baths (1961). Fr.; est. D. 26.

The Corfu fr. **13** comes from the same early third-century group as Form 27.9, etc.; other examples of the form occur together with second- to early third-century forms. The normal version is not definitely attested in the earlier part of the second century. The early variant type occurs in first-century (pre-Flavian) contexts at Tripoli, and may be assumed to be a copy of 'Pompeian red ware'.[1]

Whether the normal version of the form is a direct derivative remains uncertain.

Suggested dates: second half of second century to first half third century.

FORM 182

Carandini 61.

Lid of flattened domed shape, with hooked rim, curved on the outer surface. Burnished on top. Rim often discoloured on outside. Frequently a groove round top at beginning of curve down to rim. For unslipped version, see Form 195. Size-range: max. D. *c.* 22–33. Common.

Examples:

1 Rome, Palatine (near House of Livia); *NSc*, 1967, p. 303, no. 2f, figs. 22–23. D. *c.* 31·5. Rim discoloured. No groove indicated on top.

*2 British School at Rome, from Eretum area (S. Etruria survey, site 061648). Fr.; est. D. (max.) 25. Groove round top.

*3 Corfu, Roman Baths (1961). Fr.; est. D. 29.

Variant

4 Tunis, Bardo (ex Houdart Coll.). D. 29·7. Normal shape, without groove round top. Slip as regular African series (Form 1 ff.) on top, rather thin. Probably from another factory.

This form is regularly found together with Form 181, having roughly the same distribution-pattern. It is therefore very likely that it served as the lid of the latter, although its shape is not very satisfactory. Presumably it was meant to fit over the

[1] Cf. Kenyon, in *Samaria-Sebaste* iii 298, fig. 68.10; Hawkes & Hull, *Camulodunum* 221, form 17A.

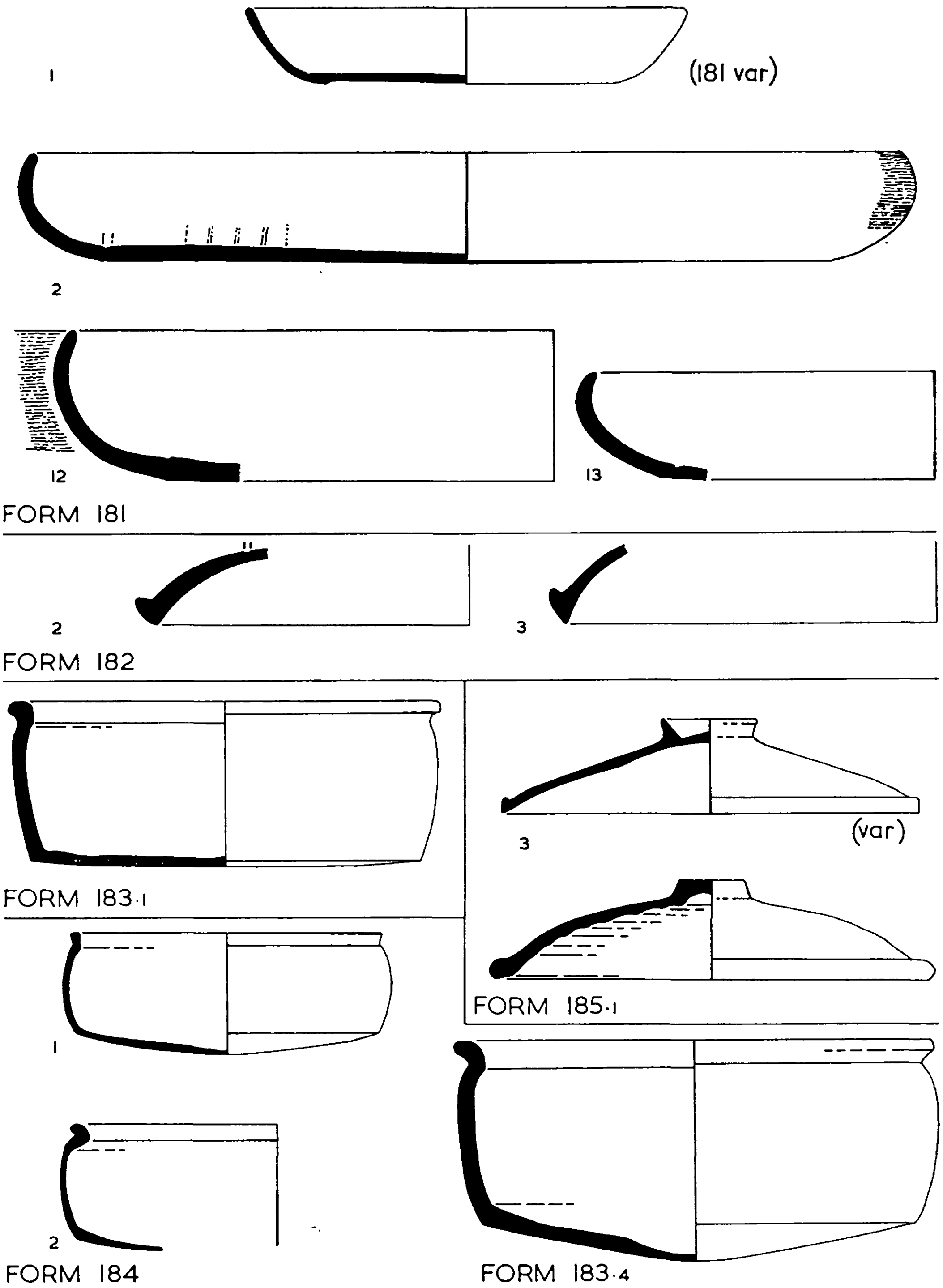


FIG. 35 Scale 2 : 5

rim of the dish-type, not inside it (where it would be difficult to lift it off). The two forms are, one may note, of roughly the same size. Direct dating-evidence is scanty; **3** comes from the same group as Form 181.13.

Suggested dates: second half of second to first half of third century (as Form 181).

FORM 183

Cf. Carandini 71.

Deep casserole. Flat or sagging base, more or less vertical wall, short concave rim. Thick-walled gritty fabric, apparently unslipped; outside burnished, inside and top of rim rough. Clay mostly deep pinkish-red or maroon; burnished surfaces brownish-red. For lid see Form 185.
Medium-sized; see examples below. Common in Tunisia; rarely exported.

Examples:

- *1 Louvre CA 2857, from Sousse. D. 16·2. Base almost flat.
- 2 Carthage, Lavigerie. D. 15·4. Similar; rim slightly hooked. (Same place: a second example, similar.)
- 3 Univ. of Michigan 7000, said to be from Carthage; *CVA Univ. of Michigan 1*, pl. XLV.23. D. 15·7. Sagging base; inside of rim slightly concave. (Form 22.3 acts as the lid of this piece, and may have been found together with it; however, it cannot have been the original lid, being of a different fabric.)
- *4 Mainz O 34895, from Tunisia. D. *c.* 18·0. Sagging base.
- 5 Cracow, University coll. 13355(?), from Carthage region; *CVA Collections de Cracovie* (Pologne 2), *Coll. de l'Université*, pl. 16.24. D. 14, H. 8·5. Deep, with flattish base. Provided with lid: Form 185.2.

Variant: Form 183/184

- 6 Louvre CA 2856, from Sousse. D. 13·2; H. of wall and rim 5·2. Similar, but shallower, with small bead-rim (as Form 184); normal coarse fabric.

Perhaps not from the same factories as Forms 181–2; the fabric is somewhat inferior. Exportation outside Tunisia and Tripolitania[1] seems to be negligible.

Date uncertain (second or third century).

FORM 184

Shallow casserole, with sagging base, slightly convex wall and small concave bead-rim (or the like). Rather thin-walled gritty clay, apparently slipped and carefully burnished on outside. The form of the lid is unknown. Smaller than Form 183. Fairly common in Tunisia.

Examples:

- *1 Louvre CA 2855, from Sousse. D. 11·7. Small upright rim. Well-polished surface.
- *2 Lepcis Magna, Serapeum C 56. Fragmentary; est. D. 15·5. Thickened bead-rim.

[1] Vessels of this form appear to be quite common at Sabratha (K. Kenyon's excavations; unpublished).

3 Univ. of Michigan 7002, said to be from Carthage; *CVA Univ. of Michigan 1*, pl. XLV.22. D. 12·1. Short concave rim with slightly concave inner surface (cf. **1**).

4 Cracow, University coll. 13356, from Carthage region; *CVA Collections de Cracovie, Coll. de l'Université*, pl. 16.25. D. 13. Similar.

5 Copenhagen 8058, from el-Djem; *CVA Copenhague 7*, pl. 312.11. D. 12·8. Thickish fabric. Short sloping rim.

Variants

6 Sousse Museum (on display). Large variant; D. around 25.

7 Carthage, Lavigerie. D. 11·6. Variant in thin fine ware with glossy vermilion slip, as Forms 171–179. Wall bulges at bottom; small everted rim.

8 Copenhagen ABc 701, from Tunisia. Similar to **7**, in fine fabric with slip on exterior. Fired grey. Short flat rim.

A smaller, finer version of Form 183, apparently made in the same factories and with a similar distribution-pattern. The chronological relationship between the two forms is at present uncertain. The variants **7–8** presumably date from the first half of the third century.

Date uncertain (second or third century).

FORM 185

Carandini 62.

Casserole lid, going with Form 183, in similar coarse fabric. Shallow domed shape with low flat knob and thickened rolled rim. Line-burnishing on top.

Examples:

*1 Louvre CA 2859, from Sousse(?). D. 16·7.

2 Cracow, University coll. 13355(?) from Carthage region. Lid going with Form 183.5, *q.v.* Apparently this form.

A number of other casserole lids may be noted in passing. The forms to which they belong are uncertain. They have a local Tunisian circulation only, and their dates are at present unknown.

*3 Louvre CA 2858, from Sousse. D. 15·6. Conical, with small rim-moulding and foot-like knob. Thin slip, roughly polished.

4 Louvre, uncat., from Sousse. D. 12·4. As **3**, of poorer quality.

These two pieces may go together with the small dishes as Form 181.1 above. They are perhaps early; cf. Form 192.

FORMS 186–190: vacant

FORMS 191–200: Unslipped vessels

Ware as the early series of slipped forms (Form 1ff.), often with a pinkish tinge. Exterior surfaces of rims and walls frequently fired grey as a result of irregular firing-conditions. These correspond more or less to Lamboglia's class of 'vasi a patina cenerognola' (Adroer: 'ceramica cenicienta') and 'piatti a bordo annerito' (Niemeyer's 'Schwarzrandware').[1] Basically kitchen-ware shapes: casseroles, jars and lids.

This plain ware can be traced well back into Hellenistic times, and is clearly the ancestor of the whole African Red Slip series. It continued to be produced alongside the slipped wares until the third century. The early forms were not widely exported. I list below all the vessel-forms known to me in this fabric, regardless of date.

FORM 191

Casserole of more or less standard late Hellenistic shape: shallow sagging base, slightly concave wall and broad flat rim; flat recessed band on inside at junction of rim and wall to receive lid; offset on inside where floor meets wall.[2] Lid: Form 192.

Mostly medium-sized (as **1**); a few smaller examples (as **3**). Common.

Examples:

*1 British Museum, Egyptian Dept. 5257, probably from Tripoli.[3] D. 24·3. Thin surface wash with slight sheen ('self-slipped'); exterior wall and both surfaces of rim fired drab brown (from exposure in kiln). Form 192.1 is probably its lid.

2 Same, no. 5259. D. 26·4. As **1**, with similar discoloration of exterior. Form 192.2 is probably its lid.

*3 Univ. of Michigan 69, from Carthage (purchased from Musée Lavigerie); *CVA Univ. of Michigan 1*, pl. XLV. 21. D. 17·8. Exterior fired grey. Smaller, shallower version, with more flaring wall.

There are examples of this form in the Tripoli Museum (Libya), from Ben Gascir, in grave-groups containing late 'Campanian' black-glaze wares (of late second or first century B.C. types). To judge by comparable forms elsewhere, this type of casserole may have continued in production until the mid first century A.D. or even later. Examples occur among the material from Pompeii; among these one may cite a number of sherds published by Bruckner (*RCRF Acta* vii (1965) 8–9, fig. 2.1–2,6,8), which appear to be of this ware. It may prove to have a wider circulation in the Western Mediterranean region than has hitherto been evident.

[1] Lamboglia, *Albintimilium* i 203; Niemeyer, *Madrider Mitt.* iii (1962) 112–13, fig. 5; Adroer (1963) 105–110; Carandini, in *Ostia* i (1969) 86–88.

[2] For a similar shape in other wares, cf. Robinson (1959) F 76 (probably Augustan); Lamboglia, *Albintimilium* i 101, no. 32 fig. 49 (called Caesarian). For Hellenistic casseroles in general, see Thompson, *Hesperia* iii (1934) 466, fig. 121. The normal late Hellenistic type has grip-handles applied to the rim; the African version does not.

[3] One of a series of vessels (nos. 5233–5264) sold by H. Salt (then British Consul in Egypt) to the British Museum in 1821. Thought to be from Egypt, but the range of vessel-types is strikingly similar to that present in the early Roman tomb-groups from Tripoli published by Aurigemma (1958), and quite unlike anything from Egypt. It seems likely that they represent some of the finds from H. Warrington's investigations at Tripoli at just this period (see Aurigemma, *op. cit.*, appendix, for some details of Warrington's activities in the early 1820s).

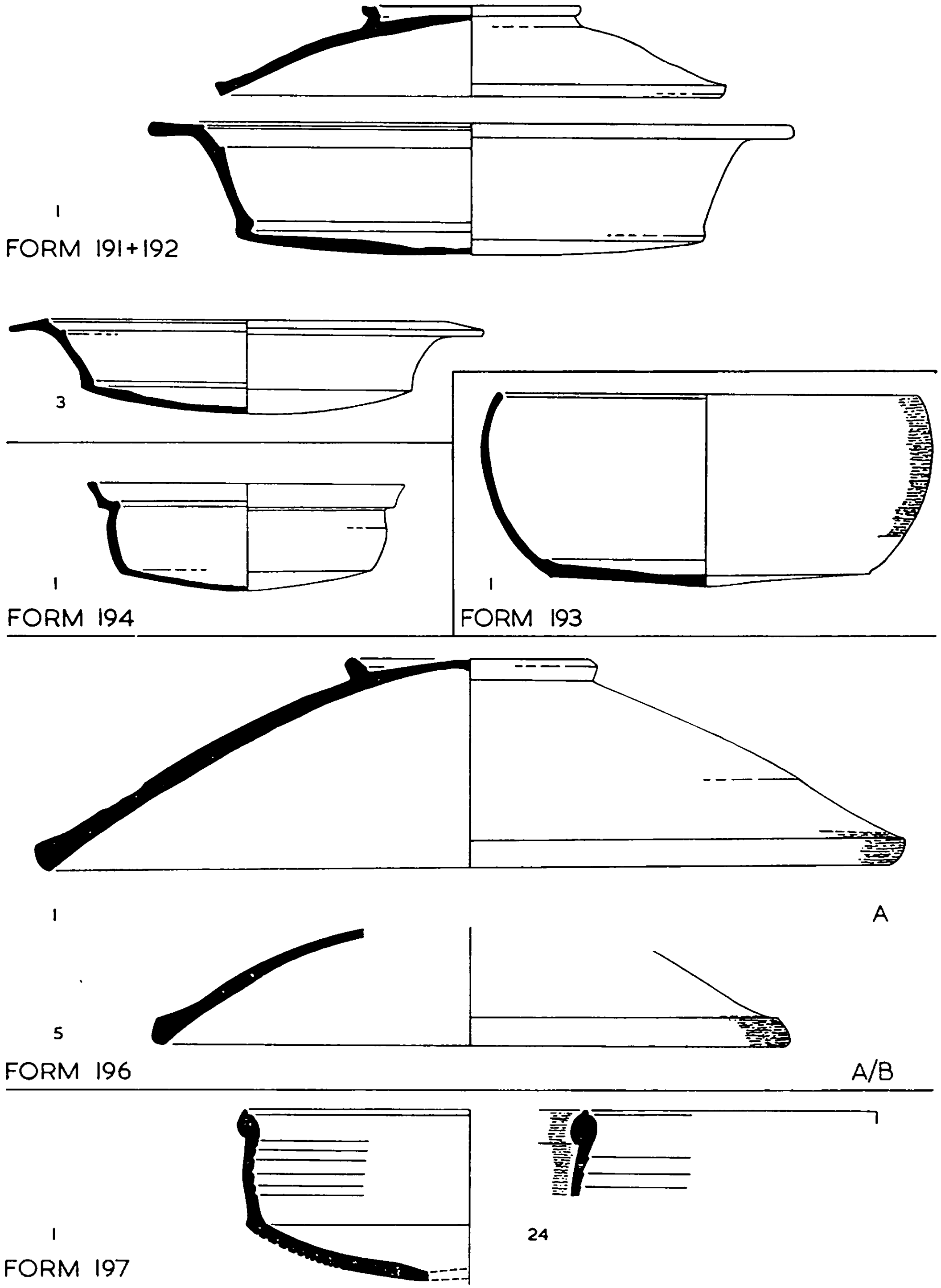


FIG. 36 Scale 2 : 5

FORM 192

Lid, going with Form 191. Shallow domed shape, with plain rim, bevelled flat on outer edge, and a low flange on top in the form of a small inverted knobbed foot with flat upper surface.

Examples:

*1 British Museum, Egyptian Dept. 5261. D. 19·2. Fits Form **191.1,** to which it probably belonged.

2 Same, no. 5256. D. 21·9. Similar, fitting Form 191.2. Outside of rim blackened.

Date as Form 191; probably the predecessor of Form 196.

FORM 193

Deep casserole, with plain convex sides and flat base, sagging slightly. Small offset on inside at junction of wall and floor. Exterior wall tends to be discoloured. Not very common.

Examples:

*1 London Museum, Layton Coll. P 751. D. 15·8. Thin slip on inside. Most of exterior surface blackened (see profile).

2 Leiden HNN 160; from Ksour es-Saf; Holwerda no. 940, fig. 23. D. 14·6. Exterior blackened, as on **1**.

Probably early, as Forms 191–192. Some casseroles with a groove on the top of the rim (the so-called 'orlo bifido') appear to belong here, e.g.:

3 Pompeii, Casa del Fauno; Bruckner, *RCRF Acta* vii (1965) 8, fig. 1.2. Est. D. *c.* 20·5; fragmentary.

The parallels for this type (see Bruckner, *loc. cit.*) are predominantly first century B.C.

FORM 194

Casserole. Unslipped version of Form 19 (=Lamboglia form 10). No feet, no grooves on underside. Uncommon; form of lid uncertain.

Examples:

*1 Univ. of Michigan 65, from Carthage (purchased from Musée Lavigerie); *CVA Univ. of Michigan 1*, pl. XLV. 24. D. 11·9. Most of exterior discoloured (brownish-grey).

2 Pompeii 1248–3. D. 18·8. Exterior of wall and rim fired grey.

The Pompeii example gives a *terminus ante quem* of A.D. 79 for the first appearance of this form, which is presumably the immediate forerunner of the red-slipped version Form 19. It would seem to have died out by the time that grooving became normal on the undersides of casseroles (as on Form 23). It is perhaps a direct derivative of Form 191, through short-rimmed examples such as the Pompeii fr. *RCRF Acta* vii 8–9, fig. 2.6 (if indeed this is an African piece).

Suggested date: second half of first century A.D.

FORM 195

Lid as Form 182, unslipped; similar flattened domed form and hooked rim. Uncommon.

One complete example only:

1 Ostia 5555; *Ostia* i (1969) 87, pl. LXII, fig. 850. D. 35. Top gently convex, encircled by two grooves. Rim hooked upwards; blackened on convex outer surface.

Date uncertain, but presumably as Form 182.

FORM 196

Large lid, of conical domed shape, fairly high, with slightly thickened rim, convex on outside with angle at top. Outside of rim generally blackened from exposure in kiln. Two types:

A with flange of small diameter on top, in the form of a small inverted foot (as on Form 192, though less sharply modelled).

B with plain rounded top (cf. Form 195).

Size-range: D. *c.* 22·5–36. Common.

Examples:

Type A

*1 Cosa CF 825 (in American Academy, Rome). D. 32·8. Rim fired grey; smoothing-marks on exterior.

2 Hippo Regius; Morel, *Bull. d'arch. algérienne* i (1962–5) 136, fig. 102. D. *c.* 30.

3 Ventimiglia; Lamboglia, *Albintimilium* i 139, fig. 78, no. 34. D. *c.* 22·5.

Type A or B

4 Centcelles (1959–61), 396a; Niemeyer, *Madrider Mitt.* iii (1962) 112, fig. 5, no. 37. Est. D. *c.* 26·4. Centre missing; a small foot-like flange is restored on the publishing drawing, but the diameter available seems too small for such a solution. Probably Type B.

*5 Lepcis Magna, Serapeum C 58. D. 24·1. Fragmentary; top missing.

Type B

6 Rome, Palatine (near House of Livia); *NSc* 1967, p. 303, no. 2g, fig. 21. D. 26. Rim fired grey.

7–8 Barcelona 7522, 7523; Adroer (1963) 110. Both fragmentary, of D. *c.* 20·5.[1]

These vessels seem more likely to be lids than shallow bowls (the other alternative), and to represent a continuation of the type of Form 192. However, there are no dishes or casseroles in the unslipped series which correspond in size to them. It is possible that they served as the lids of the slipped casseroles of Form 23, for which no corresponding lids occur in the slipped series. No other explanation would seem to account for the frequency with which they occur on sites throughout the Western

[1] The nos. accompanying the two profiles seem to be confused.

Mediterranean area. Some of the smaller examples may also have been used as the lids of Forms 197–198.

Date: probably mid second–mid third century; no more precise dating is at present possible. Morel is inclined to put **2** in the first half of the third century, a date which would also be suitable for **1**. Examples occur in second- and third-century levels at Ventimiglia and Ampurias; **3** comes from a predominantly third-century context. If the form is in fact the lid of Form 23, the large specimens (as **1–2**) may be assumed to be late in the series.

[For further comments on this form, see *Ostia* i 86.]

FORM 197

Casserole with more or less vertical wall, rounded bottom, and heavy convex rim-moulding with a small hollowing on inside to receive a lid. Underside bears a series of small grooves or ridges (as on Form 23); similar treatment of inside of wall, often with a 'stepped' appearance. Exterior of rim and wall frequently blackened, as on the preceding Forms.

Size-range: see examples below (D. *c.* 14–25). Common.

Examples:

*1 Cosa CF 1580 (in American Academy, Rome). Est. D. 17·6; fragmentary. Slight 'lip' at junction of wall and base.

2 Vienna IV 1314. D. 16·1, H. 5·7. As **1**, fairly shallow. Projecting lip at junction of wall and base. Exterior of wall and rim discoloured.

3–14 Leiden, from Tripoli and various sites in Tunisia; Holwerda nos. 927–938. D. *c.* 14–17·5. Shallow and fairly deep versions.

15–16 Sant Antoni, Ibiza: *Ampurias* iv (1942) 153, pl. V, 4–5. Shallow and deep versions.

17–18 Algiers, from Draria el-Achour; Camps (1955) 236, fig. 6.5–6, type X. D. 17·0, 17·2; H. 9·0, 8·5. Deep, tending towards Form 199. **17** a variant type, with ridging on outside of wall and plain rim, slightly outcurved.

19–21 Barcelona 7589, 7590, 7593; Adroer (1963) 108–10. D. *c.* 21–24, H. *c.* 10–10·6. Deep versions, with strongly convex bottoms bearing 'stepped' ridges.

22 Ventimiglia, Theatre excavations T. 26041; Lamboglia, *Riv. st. lig.* xxviii (1962) 288, fig. 19A, no. 29. D. *c.* 20·5, H. *c.* 9·5. Similar.

23 Ampurias excavations; Almagro and Lamboglia, *Ampurias* xxi (1959) 4, fig. 2.4. Fragmentary; est. D. *c.* 25·2, est. H. 11·5+. Similar.

*24 British School at Rome, from Eretum area (S. Etruria survey, site 066640). Fr.; est. D. 22. Typical 'stepped' interior. Exterior fired grey.

A predominantly third-century form, common in levels of the period at Ampurias and Ventimiglia. **22** and **23** come from what appear to be early third-century contexts. The smaller shallower versions of the form may be rather earlier, though this is by no means certain.

Suggested dates: late second to mid third century.

FORM 198

Jar, large and open, with high vertical sides, shallow rounded bottom and short overhanging rim, with slight ledge along inner edge to receive a lid(?). Faint ridging on wall, and prominent wheel-marks on inside; bottom smooth.
Rare; form of lid not known.

Example:

*1 Toronto 918.6.61, from Ventimiglia. D. 25·2–25·7, H. 20·6. Exterior of wall and rim fired grey. Used as container for a glass cinerary jar.

Early; rim- and base-form related to Form 191. For a jar of similar shape, perhaps of this fabric, see M. Almagro, *Las necrópolis de Ampurias* ii (Barcelona, 1955) 181, fig. 154, no. 15, from a group of Claudian date. The shape may have been produced specifically for funerary use. Probably first century A.D.

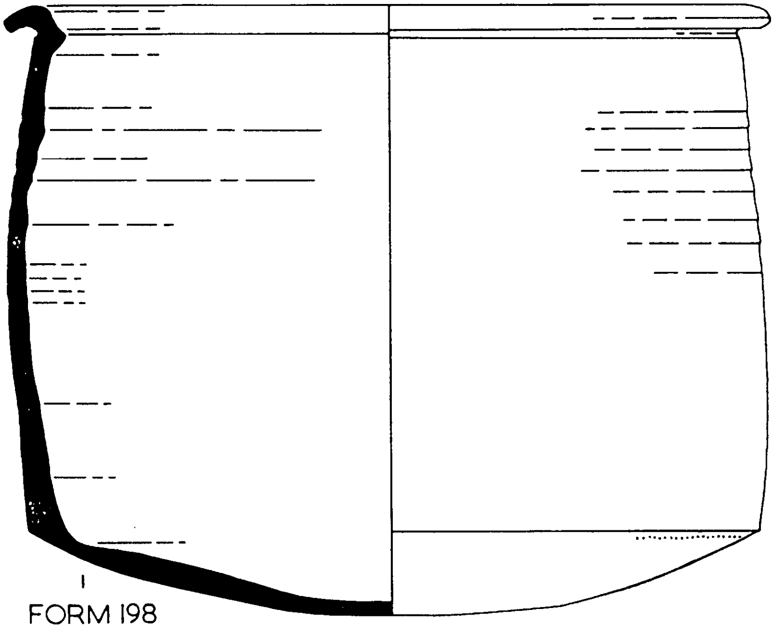


FIG. 37 Scale 2 : 5

FORM 199

Jar, large and open, with high vertical sides; rim and base as on Form 197. Shallow ridges on wall, inside and outside. Uncommon.

Examples:

1–2 Leiden HX 53, HP 72, from Carthage and el-Djem region; Holwerda nos. 925–6, fig. 23, pl. VIII. H. *c.* 15, *c.* 16·6.

A successor of Form 198, probably a contemporary of Form 197. Late second–third century(?).

FORM 200

Mug. Fairly broad body, sagging or slightly biconical, short flaring rim, flat base with groove under edge and high base-moulding. On body, handle with central groove. Thinnish ware with fine close ridging on upper part of body and prominent wheel-marks on inside. Upper part of exterior may be discoloured.
Not common.

Examples:

1–3 Barcelona 7544, 7545, 7591; Adroer (1963) 105–8. H. *c.* 10·2–13·5.

Variant

4 Barcelona 7540; *ibid.* 105. H. *c.* 11·3. Similar, with more slender ovoid body and slight foot. Apparently slipped.

The shape has connections with Form 140; the body-ridging and technique are those of Form 197.

Probable dates: late second to early third century.

RELIEF DECORATION

Mould-made relief decoration such as that on the TS wares is relatively uncommon, being more or less restricted to the rectangular dishes and plates of Forms 56 and 89A, of late fourth- to early fifth-century date. The normal style is flat and linear, with details rendered by incised lines, fine stippling and rows of dots, as on contemporary silverware. For the range of motifs, see pp. 83–91 above. The style is discussed in detail by Salomonson in his article of 1962. The unique Form 180 belongs to this series. For two isolated specimens of earlier date, also close copies of metalware vessels, see Forms 25 and 35 above (PLATE I *d*, *b*).

Applied decoration is more common, being a regular feature of several vessel-types of the third, fourth and early fifth centuries. These may be divided into an earlier and a later series, the former comprising the closed Forms 171–179 and a number of related open shapes (Forms 24, 36–41), the latter the bowls of Forms 52B and 53A and some examples of Forms 51, 54 and 55. The appliqués on all of these are more or less uniform in style, rather crude but lively, in a low and flat relief. In the earlier series they are scattered all over the body or floor of the vessel, either in panels with vertical dividers or freestyle; most of the motifs relate to the *venationes* (wild-beast shows). Those of the later series, which are disposed around the rim or floor of the vessel, exhibit a wider range of subjects; wild beasts, fish, mythological and Biblical scenes predominate, sometimes (on Form 53A) forming connected compositions rendered in narrative style. Each of the two series has its own range of figure-types; those of the later series recur on Form 56 (as rim-motifs) and on the African lamp series.[1]

The early series may be dated *c.* 200–250/275, while the later one belongs mainly to the second half of the fourth century and the early years of the fifth (for dating-evidence see discussion of individual Forms above). Some slight continuity between the two seems likely (see remarks under Forms 51 and 52B above), though as yet

[1] See below, pp. 311–13.

examples are sadly lacking in well-dated contexts of the late third and early fourth centuries.

Early style

For examples of this style see PLATES VIII–X. A more or less complete range of the motifs on the closed forms is given in *Cat. Alaoui* (1922) 307–16; some of these are further discussed and illustrated by Salomonson in his 1960 article. For the motifs present on the open shapes, see especially Toynbee (1957) *passim*, and *Ostia* i (1969) pls. III–V, LIV–LV. These fall into two main groups: dividing ornaments, which are mostly of a floral nature, and the motifs in the panels thus delimited, mostly animals and human figures. Three schemes of decoration are current on the closed forms: (1) divider-figure-divider (repeated on back); (2) divider-figure-divider-figure-divider (Forms 171, 174); (3) freestyle, with several figures, flanked on each side by divider (Form 171 only). A narrow band of subsidiary decoration at the top is also present on some pieces of Form 171. On the related bowls the decoration is either arranged in panels (Forms 36–37) or freestyle (Forms 24, 38, on rim, and 39–41, on floor).

Of the dividing-motifs by far the commonest is the palm-branch (as on PLATE VIII). Other less common types are sprigs of oak and other plants, sometimes bearing acorns or berries,[1] floral scrolls,[2] and on rare examples tree-stumps,[3] hanging loops[4] and superimposed palmettes.[5] Miniature columns with capitals formed of double rows of volutes occur several times; some of these have spirally fluted shafts.[6]

Peculiar to this style is the frequent appearance above the main motifs of appliqués shaped like inverted swags or diadems (PLATES VIII, IX *b*, X *b*). These, to judge by the leaf-bands depicted on them, probably represent victors' crowns—motifs in keeping with the series as a whole, with its strong emphasis on *venatio* scenes. In addition, a narrow band of subsidiary decoration—rows of shells, bunches of grapes and the like—occurs below the rim on some examples of Form 171.[7] Both these and the crowns seem to be optional features with no particular chronological significance; they appear in association with most of the known figure-types.

Many different figure-types, none particularly common, are used in the panels. These rarely appear in the same combinations. The date of each within the series as a whole is at present impossible to determine. The most common group of subjects relates to the wild-beast shows or *venationes*. Most of the wild beasts of the arena are represented; lions and boars seem to be the commonest, with bears, wild horses, stags, elephants, zebus (humped bulls) and ostriches occurring less frequently.[8] A popular motif, occurring in several versions, is that of a *venator* struggling with a beast or, occasionally, standing victorious over his victim.[9] Several pieces show the *venator*, protected by his shield, being attacked by a panther;[10] on others he is

[1] E.g. Form 171.15 (*Tunisian Exhibition* no. 51, fig. h), 18, 27, 47; Form 172.13; Form 174.14.

[2] E.g. Form 172.24; Form 174.4 (*Tunisian Exhibition* no. 54, fig. k).

[3] E.g. Form 174.11 = PLATE X *a*.

[4] Form 36.1.

[5] Form 37.1.

[6] E.g. Form 171.19, 25, 45; Form 172.22; Form 173.1.

[7] See Form 171.25, 27, 44–46.

[8] See *Cat. Alaoui* (1922) *passim* for examples.

[9] E.g. Form 171.44–47, etc.

[10] E.g. Form 172.24; Form 174.4 (*Tunisian Exhibition* no. 54, with fig.).

shown advancing with sword and shield to meet an imaginary beast—sometimes depicted on the other side of the vessel.[1]

A group of examples of Form 171, to which Salomonson has drawn attention (Salomonson (1960) *passim*), are more intimately connected with the arena, and may have served as mementoes of the shows. On these (Form 171.44–47) the whole of the body is treated as a single field, in which are disposed a number of figures surrounding a victor's wreath and a *tabula ansata* bearing the name of one of the rival schools of *venatores* which flourished in Roman Africa during the third century. Two bowls (Form 41) and two flagons (Form 172.25–26) bear similar wreaths and inscriptions. Salomonson has shown that the small symbols which appear on the wreaths are the emblems of these same schools. Similar wreaths appear occasionally on vessels with more normal decorative schemes (see Form 171.26, Form 172.21, Form 174.15). All the inscribed pieces come from central Tunisian sites; their market was clearly local only.

A few of the figure-types depict other forms of entertainment: a boxer, a chariot with charioteer, figures of actors and theatrical masks.[2] Mythological motifs are more common; the most frequently used are a small winged running figure (Cupid or Mercury) carrying a small bag,[3] a satyr with a panther(?) on a lead,[4] a satyr with *pedum*,[5] a maenad,[6] Bacchus with some of his attributes,[7] and a woman, possibly Venus, holding in both hands what may be a mirror or a pair of cymbals.[8] Cupids appear in several different guises;[9] also quite common is a group of three figures standing before a lighted altar.[10] Animal motifs other than those connected with the circus are rare; some hares and hounds occur.[11] Sometimes an inanimate object occupies one of the panels: apart from the wreaths already mentioned, canthari, rosettes and lozenges decorated with rosettes are found.[12] Finally, one may note the peculiar motifs on Form 171.48, which include a cast of a coin (see remarks in Catalogue above).

Two plates of roughly the same date as the above are decorated in a markedly different manner: Form 48.11, and a fragment formerly in the Arndt Collection published by Pagenstecher.[13] These plates bear decoration on the rim consisting of a continuous frieze of animals chasing each other among trees. The motifs and composition, with pairs of animals separated by trees, are closely modelled on those fashionable on contemporary silverware;[14] they find a parallel on the unique

[1] See Form 172.21; Form 173.2; Form 174.4.

[2] Boxer: *BAC*, 1916, pl. XXIX (Form 171.12). Chariot: Form 171.21 and Form 174.7. Masks: Form 173.2 and Form 171.48. Actor: Form 174.3.

[3] E.g. Form 172.24; Form 177.1; Form 39.1.

[4] E.g. Form 174.15.

[5] E.g. Form 171.39; Form 177.1.

[6] See *BAC*, 1916, pl. XXX (Form 171.3).

[7] E.g. Form 172.13, 23; Form 174.12.

[8] Cf. Form 40.1.

[9] *BAC*, 1916, pl. XXX (Form 171.3); Form 172.23; Form 171.30; Form 174.11; etc.

[10] E.g. Form 174.11; Form 39.1.

[11] E.g. Form 171.15 (*Tunisian Exhibition* no. 51, with figs.); Form 171.48; Form 173.1; etc.

[12] See Form 172.15, etc. Lozenge with rosette: Form 171.39 = PLATE VIII.

[13] Pagenstecher, *Sieglin Exped.* ii.3 (1913) 113, fig. 122. Fr. of a dish with flat rim, of very large dimensions; form apparently similar to the above. W. of rim *c.* 4·4(?). Small moulding at lip; two fine grooves on outer part of floor. Appliqués on the rim. Two stamp types (stag and donkey) are identical with those on Form 48.11. Date: third quarter of third century.

[14] Cf. the Caubiac pieces (*BMCat. Silver Plate* nos. 137–139, pls. XXI–XXII), the Valence bowl (*ibid.* 120, fig. 24, no. 75) and the Wiesbaden bowl (E. Ritterling, *Kastell Wiesbaden* (Der obergermanisch-raetische Limes des Römerreiches 31 (1909)) 135, pl. IX, no. 5; Drexel (1909) 190, no. 36, fig. 3). For the vessel-form cf. Drexel 182–4, 192–3, pl. VI, Form 1.

Form 35.1 (Plate I*b*) though its decoration appears to be mould-made. Some identical figure-types appear on both plates. On the basis of the findspot of Form 48.11 they made be dated *c.* 250–270. A number of similar motifs, also modelled on silverware, are present on the plates and bowls of Forms 24 and 38, which are probably to be classed as the forerunners of these pieces.

Transition to late style

The decoration on the bowls of Form 52B provides a link between the early and the late series. This takes the form of a number of appliqués loosely arranged at more or less regular intervals round the rim. Though generally related in subject-matter, these can hardly be said to form connected compositions, but are merely ornamental. The earliest examples appear to date from the end of the third century (see Form 52.15), though similar arrangements are still present in the 'late' phase. Direct dating-evidence for this transitional phase is at present non-existent.

In all probability Form 51.1 is a contemporary of the earlier pieces of Form 52B; its decoration of crabs and fish is unique, but related to some later motifs. The other pieces of Form 51 may also belong here, though they could be somewhat later. Various kinds of fish and animals, baskets of fruit and the like seem to be the stock motifs of this phase.

Late style

This may be said to begin around the middle of the fourth century with the appearance of the bowls of Form 53A and the dishes of Forms 54 and 55. Its main feature is the arrangement of the appliqués to form connected compositions. Though a number of the motifs current in the early style are still popular, the range of figure-types is completely different. Individual motifs are often quite large. Close links exist with the mould-made dishes of Form 56. For examples of the style, see Plate XI.

Some developments may be observed within the style. Probably early are the two vessels Form 48.12 and Form 54.1, which have rather loose compositions, similar to those found on the early series. These pieces, which share certain motifs, may date from around 350 (or a little later), and appear to be the precursors of rest of the dish series (Forms 54 and 55). Form 53.3 and Form 53.14, which have their decoration arranged in a band round the inside, may belong to the same phase. Animal motifs, *venatio* scenes and the like appear to predominate at this stage. Shortly afterwards, figured scenes, generally with mythological or Biblical subjects, become the norm. These find close parallels on Form 56. In the case of Form 53A the frieze arrangement gives way to a single overall composition, applied with little regard to the grooved decoration, which tends to disappear. Pairs of bowls with related subjects are not uncommon.

For a detailed study of the style, and discussion of its subject-matter, see Salomonson (1969) *passim*; a list of individual motifs is appended below.

Motif

1 *Fish.* The commonest motif; several versions, most of which seem to correspond to recognizable Mediterranean species (mullet, gurnet, in one instance (Benaki Mus. 12488) a flat-fish). Mostly found on Form 52B, in groups, or alternating with other motifs; also occurs on Forms 51B, 53A, 54.

Examples: Form 51.5, Form 52.11, 13, 14, 19, 20, Form 53.7, Form 54.5; also De Waal (1904) 311, no. 4, pl. III, 2; Waagé (1933) no. 121, fig. 2; *NSc* 1956, 179, fig. 15 right; Vermaseren and Van Essen (1965) 368, nos. 620, 624, 635(?), pl. 87.3, 5; *Arch. Delt.* xxi (1966) B, pl. 355 γ top; many other unpublished examples. Cf. also Form 56, rim-motif *vi*; further examples on lamps.

2 *Dolphin.* Used in pairs flanking Oceanus-heads on Forms 51, etc.; also appears on Form 52B and possibly Form 53A.

Examples: Form 51.2–5; see also Pagenstecher (1909) 181; Squarciapino (1951) 135–6, no. 3, fig. 2 top r.; *Arch. Delt.* xxi (1966) B, pl. 355 γ bottom. Cf. also Form 56, rim-motif *vii*.

3 *Lion.* Common; several versions, mostly running or springing, occasionally pacing or at bay. On Forms 52B (mostly small) and 53A (larger, as on Form 56). Used with lionesses, other animals and floral motifs, sometimes as parts of connected compositions.

Examples: PLATE XI *a*.
Form 52.5, 10, 15–17, Form 53.8, 11, 12; Form 55.3. Also Squarciapino (1951) 136, nos. 4–5, fig. 2 bottom l., and p. 139, no. 4; Vermaseren and Van Essen (1965) 368, nos. 616, 621, 627, pls. 86.7 and 87.7; several unpublished. Cf. also Form 56, rim-motifs *ii* and *v*.

4 *Lioness.* Less common, depicted running. Mostly small. On Form 52B only, sometimes alternating with lions.

Examples: Form 52.4, 10, 21(?); also Vermaseren and Van Essen (1965) 368, no. 617, and unpublished pieces from Athenian Agora.

5 *Panther.* Several examples, mostly running, distinguished from lions by their spots. Mostly on Form 52B.

Examples: *BAC*, 1930–31, p. 460, pl. XXII; Squarciapino (1951) 136, no. 6, fig. 2 bottom r. Cf. Form 56, rim-motifs *ii* and *v*. Form 54.2 shows a panther mauling an ostrich.

6 *Boar.* Several examples, of varying sizes; found on Forms 52B and 53A. For an early version of the type see Form 54.1 (PLATE XI *b*).

Examples: Form 53.12; Waagé (1933) no. 122, fig. 2; others from the Athenian Agora, etc. (unpublished).

7 *Bear.* Several examples, of more than one type; occurs on Forms 52B and 53A. On the fr. Form 53.14 part of a *venator* also appears; cf. Form 56, rim-motif *iii*.

Examples: Form 52.4(?); Vermaseren and Van Essen (1965) 368, no. 628; several pieces in the Benaki Mus., Athens.

8 *Hound.* Several examples, normally running. Occurs on Forms 52B and 53A in combination with a variety of motifs. Sizes vary. Cf. Form 56, rim-motif *iv*.

Examples: Form 52.7, 21; cf. also Vermaseren and Van Essen (1965) 369, no. 629.

9 *Hare.* Not very common; various types, usually crouching. The fur is sometimes indicated by dots. On Forms 52B and 53A. On one bowl (Form 53.3) hares form part of a connected composition. The treatment is rather different from that on Form 56 (rim motif *iv*), and more closely related to that on Form 171.48. Other examples: Gavault, *BAC*, 1895, 140, no. 12, pl. VII, fig. 7; *BAC*, 1930–31, 460, pl. XXII; Vermaseren and Van Essen (1965) 369, no. 640; Benaki Mus. 12509.

10 *Hound with hare.* One example only, on Form 53.3 (*q.v.*).

11 *Goat.* Rare. See Form 53.16, and Form 54.3.

Motif

12 *Ram.* Two examples: Form 55.3 and Benaki Mus. 12498 (Form 52 variant). The former is part of an Abraham and Isaac scene (see **45** below).

13 *Other animals.* Single examples of the following are recorded: horse or ass (Form 53.12), lion and horse(?) side by side (Benaki Mus. 12495; Form 52), stag (Benaki 12510; Form 52), and antelope(?) (Benaki 12508; Form 52).

14 *Bird in tree.* One probable example: *BAC*, 1902, p. CCX, no. 4 (Form 52). Perhaps early; cf. Form 54.1.

15 *Venator.* Though common in the early series and on the late Form 56 (see rim-motifs *ii*, *iii*), relatively few examples occur in this style (see under **7** above).

16 *Horse and rider.* One example only: Athens Agora P 10861 (Form 53A).

17 *Men/cupids in a boat.* A number of examples; some may form parts of Jonah-cycles (see **46** below), others definitely show Cupids. On Form 52B, etc.
Examples: Vermaseren and Van Essen (1965) 368, nos. 618–9, pl. 87.1–2; Athens Agora P 6718; Benaki Mus. 12475.

18 *Cupids fishing.* One example: Athens Agora P 1923 (Form 53?). Cf. Form 56, rim-motif *vii*.

19 *Cupids bearing vintage.* One example: Athens Agora P 7800 (Form 53). Also found on lamps.

20 *Head of Oceanus.* The standard decoration of the handles of Form 51, usually flanked by dolphins. Shown full-face, heavily bearded, with horns.
Examples: Form 51.2, 3, 5, 6, Form 54.4; *Samaria-Sebaste* iii 345, fig. 83.25 (Form 52 variant).

21 *Head of Acheloos.* Two examples: Form 52.11, 14 (used together with fish). Cf. also Vermaseren and Van Essen (1965) 368, nos. 622–3, pl. 87.4 (perhaps preceding motif).

22 *Triton?* One example: Benaki Mus. 12501 (Form 53A).

23 *Sea-monsters.* Various kinds, perhaps forming one or more cycles. In some cases connected with the Jonah cycle (see **46** below). Found on both Form 52B and Form 53A. Cf. Form 56, rim-motifs *vii* and *xi*.
Examples: Form 53.7 (one vomiting a Jonah-figure); Squarciapino (1951) 139, no. 2; Vermaseren and Van Essen (1965) 369, no. 643; Benaki Mus. 12476 and 12507.

24 *Basket of fruit.* Common; several varieties, containing bunches of grapes, pomegranates and the like. Mostly on Form 52B; used both alone and alongside other motifs.
Examples: Form 52.9, 12, 15, Form 53.3; also Vermaseren and Van Essen (1965) 368, nos. 625–6; *ADelt.* xxi (1966) B, pl. 355γ, centre; others unpublished.

25 *Palm-branch (or leaf).* Common; mostly rather small. Used alone and with other motifs; occasionally as a filler in a figured scene. Generally on Form 52B.
Examples: Form 52.7, 16–18, 21–22, Form 53.4, 6; *Antioch* iv.i 51, fig. 28.4; *BAC*, 1902, CCX, no. 4; *BCH* lxxxvi (1962) 751, fig. 6 (p. 753); etc.

26 *Vine-leaf.* One example: Form 52.8.

27 *Bunch of grapes.* With **26** above.

28 *Oak-leaf/oak-spray.* See Form 52.6, 13.

29 *Conical bush or tree.* See Form 54.2. Also used in Hercules cycle (**36** below).

30 *Tree with fruit.* A number of versions, mostly resembling the stylized trees found on silverware.
Examples: Form 53.1, 3, Form 55.3; Athens Agora P 7552 (Form 53). Cf. motif on Form 56.12. For a version without fruit, see Form 53.2.

31 *Cantharus.* Three examples, in figured scenes, etc.: Form 53.1, 5; Benaki Mus. 12497. For other related canthari, see Form 56. 13–14 and rim-motif *v*.

Motif

32 *Aedicula.* One example of Form 53A: Athens Agora P 7799. Type identical with that found on Form 56 (rim-motif *v*).

33 *Double-tiered volute-capital.* Revival of a motif found on the early style.
Example: Form 52.5. For similar motifs (with columns), see the late(?) pieces Form 53.5, 15.

Large figured scenes, sometimes forming connected cycles, occur frequently on Form 53 and occasionally on other forms. Most appear to date from the end of the fourth century or later. The following scenes and figures can be identified; sherds indicate the existence of many others.

34 *Genre scenes.* See Form 53.6, etc. Other figures on frs. from the Athenian Agora (P 7208, 7553). See also Salomonson (1969) 51 ff.

35 *Erotic scenes.* See Form 53.13.

36 *Hercules cycle.* See Form 53.2. Athens Agora P 7982 bears part of a related scene. See Salomonson (1969) 33–6, figs. 40–42.

37 *Leda and Swan.* Apparently late; see Form 53.5. See *ibid.* 36–7, figs. 43–4.

38 *Ganymede and Eagle.* A fr. from the Athenian Agora (P 25495) appears to depict this scene.

39 *Ceres and Proserpina in ship*(?). See Form 53.10.

40 *Dioscuri.* Same figures as on Form 56.10–11. One fr. (Form 53): Squarciapino (1951) 137–8, no. 11, fig. 4, right=Salomonson (1962) 90, pl. XXXII, 5. See Salomonson (1969) 51, figs. 66–7.

41 *Athena* (*or Roma*?). See Form 55.1.

42 *Mithraic scenes.* See Form 53.8. A piece formerly in the Gréau Coll. (Pagenstecher (1912) 171–2) may be related. See Salomonson (1969) 30–1.

43 *Captive* (*martyr?*) *and lion.* See Form 53.11. See *ibid.* 46–50, figs. 55, 57, 59–60.

44 *Adam and Eve.* See Form 53.4. The two figures flank the Tree of Life, in which the Serpent is visible.

45 *Abraham sacrificing Isaac.* See Form 55.3. Rendering as on Form 56 (rim-motif *x*). See Salomonson (1969) 24–27, figs. 24–27.

46 *Jonah cycle.* Three frs. of Form 53 (Athens Agora P 5672, 7030; Benaki Mus. 12512) and Form 55.2 may show parts of a cycle as on Form 56 (rim-motif *xi*). Cf. also the sea-monster on Form 53.7. See *ibid.* 27–8, figs. 18, 29–30, 82.

47 *Daniel in lions' den.* A possible example on Form 55.3 (*q.v.*). See *ibid.* 28–9.

Further cycles and motifs are noted by Salomonson in his 1969 article.

STAMPED DECORATION

From the fourth to the sixth century stamped decoration is a characteristic feature of the ware. This is normally found on the floors of dishes and bowls, mainly of the larger varieties. Changes in the choice of motifs, and in the rendering and arrangements of the stamps, permit us to distinguish several successive styles, each of limited duration; these are regularly associated with particular vessel-forms. Thus the kind of stamped decoration is as reliable an indication of date as the form of a vessel, permitting quite precise dating of even small fragments.

Three main stages may be traced in its evolution. In the first, found mostly on flat-based dishes and large bowls, floral and geometric patterns predominate. These are often combined to form quite elaborate compositions, the most popular of which is a star-like pattern based on a series of radiating palm-branch motifs. An outer

row of rosettes, circle-motifs or the like is often added, framing the main pattern. In the second stage animals and some Christian symbols—especially the cross-monogram—appear. These are mostly found on large footed dishes and plates, on which repeating geometric, floral or animal motifs occupy bands round the floor, while the centre is left plain or bears cross-monograms. Some smaller vessels bear a single cross-monogram or the like at the centre. The final phase is characterized by the use of jewelled crosses, human figures and various animal and other motifs, found either on dishes, where they form large loose compositions, or on small bowls, where single stamps fulfil the role of central medallions.

Within this overall scheme up to three different concurrent styles, representing the products of different regions, may be distinguished. On the basis of these, I propose a division of the stamped series into five major styles, some of which may be further subdivided.

STYLE A (FIGS. 38, 40–43, 48, 55)

Characterized by a wide range of floral and geometric motifs, among which the commonest are stylized palm-branches, sets of concentric circles, often with toothed or whirligig fringes, rosettes and grille-patterns. The palm-branches, a hallmark of the style, are usually oval or diamond-shaped, without a stalk attached. The detailing of the motifs is not very fine, consisting mostly of regular incuse patterns. The stamps cluster round the centre of the vessel or radiate from it in a star-like pattern, each one being repeated several times. They are enclosed by two grooves or a 'triple groove'[1] (sometimes more) to form a large tondo. A narrower second band of decoration, enclosed by similar grooving, is often added round the main one. I distinguish three phases:

A (i) A small group, probably of short duration. Small stamps, arranged in neat regular patterns, generally a star-shaped arrangement of radiating palm-branches or 'petals', with small rosettes or circle motifs in the interstices or at their tips, and a narrow second band with similar stamps repeated. Palm-branches of Types 1 and 3,[2] 'petals' (Types 20–21), rosettes of Type 44A, small circle motifs of Types 22–23, etc. On dishes of Forms 59A–B and 61A. See PLATE XII *a*.

A (ii) The main group. Stamps become larger and rather coarser, and the stamping less regular; compositions are often crowded. The commonest scheme is based on radiating palm-branches, with secondary motifs added; a set of circles (stamped or lathe-turned) is present at the centre on many of the earlier examples (also found in A (i)). In other cases a variety of motifs cluster round the centre; towards the end of the phase a single repeated stamp or two alternating motifs become popular. A second band of decoration is common. The typical palm-branch motifs are of Types 3 and 4; concentric circle motifs are larger than in A (i), with three to six circles, frequently with fringed surrounds; the typical incuse rosette becomes larger (Type 44B), and is joined by several other varieties. Numerous other stamp-types are introduced: grilles (including dotted varieties), crescents, clover-leaves, squares with inscribed circles, etc. On Forms 59A–B, 60, 61A, 63, 67. See PLATES XII *b*, XIII *b*.

[1] See p. 281.
[2] See Catalogue below.

A (iii) A fairly large group. The decoration moves outwards, leaving the centre of the floor plain (cf. Styles B, C, D); it is generally confined to a band flanked by single or double grooves, and is often sparse in appearance. Two schemes are popular: a single repeated motif or two motifs alternating, and a modified star-pattern formed of a band of chevrons with subsidiary motifs between their tips, enclosed between grooves. The stamps are mostly large and coarse, without much detail, and derive from those of the preceding phase; rough grille-patterns and fringed circle motifs are popular; modified palm-branch motifs, toothed rings and a variety of patterned square motifs and the like are also found. At a late stage (transitional to Style E) a number of motifs related to Style D appear: rosette-in-circle stamps as Types 63–64, small animals as Type 153 and Chi-Rho and cross-in-heart patterns (Types 281–5). Vessel-forms: 61B, 64, 67, 69, 76 (93.1) and possibly others. See PLATES XIV–XV.

Dating: A date around the second quarter of the fourth century for Style A (i) is indicated by the Köln dishes, Form 59.2–3, which might reasonably be construed to be contemporaries of the series of dishes of Form 50 from that city, and also by the evidence for the first appearance of Form 59 (see p. 99 above). The appearance of two sherds of transitional A (i)/(ii) style in the building fills of the Constantinian basilica at Mambre in Palestine[1] could suggest a rather earlier date, if the date proposed for it (*c.* 330) is correct; however this evidence remains to be substantiated by other finds.

The earliest firmly dated piece, to be classed as early A (ii), is the dish Form 61.5, from a group of the 360s.[2] Style A (ii) is the normal style of the many stamped fragments from the Athenian Agora groups of the later fourth century; scarcely a single sherd of A (i) occurs among them. Form 61.12, from a context of *c.* 400, gives a fair indication of the development of the style by the end of the century; to judge by this A (ii) was nearing its end. The finer examples of the style (such as the Iraklion pieces Form 60.1 and Form 61.7) may therefore be placed in the third quarter of the century. That the transition to A (iii) took place in the early years of the fifth century is suggested by the Ventimiglia bowl Form 67.8 and the dish Form 61.34.[3] Style A (iii) is well represented in the early–mid fifth century levels at St. Blaise, and some fragments occur in the Athenian Agora deposits of the third quarter of the century, though the available evidence suggests that the vessel-forms on which it occurs were dying out at this stage. By the end of the century the transition to Style E (i) seems to have been complete.

Suggested dates: A (i) —*c.* 320–350.
A (ii) —*c.* 350–420.
A (iii)—*c.* 410–470 (transitional A (iii)/E (i) *c.* 450–480).

STYLE B (FIG. 39, upper motifs)

A compact group, in which palm-branches and concentric circles are the standard components. The commonest scheme consists of five palm-branches radiating from a groove round the centre; between these, concentric circles often appear, singly or

[1] E. Mader, *Mambre* (Freiburg im B., 1957) 149, pl. LXXXV (155), m–n; for the literary evidence on this building see *ibid.* 298 ff. The sherds seem contemporary with Form 59.9–10 and Form 61.4.

[2] See p. 106 n. 1.

[3] See discussion above, pp. 106–7, 116.

in rows of two or three. On some examples (perhaps late) the circle motifs appear alone. The stamps are surrounded by a double rouletted band (see p. 282) or fine grooves, sometimes both; these generally lie at some distance from the stamps themselves. A second band of decoration is rare. On early examples the groove(s) at the centre take the form of small circles; on later ones a broad area is left plain (as in Style A (iii)). The palm-branch stamps are normally triangular, with a short stalk at the base (Types 9–10, etc.), though the plain ovoid type occurs on a few early examples. Circle stamps have mostly four or five circles. A few rosettes are also found. These stamps are rather smaller and finer than those of Style A, with fine relief details; the designs are neatly executed. For the development of the style, see under Form 62A above. Fairly common, though less so than Style A. On Forms 62A, 68, and perhaps 60 (variant) and 66.

Dating: This style is present only during a limited period in the fourth and fifth centuries, being closely associated with the vessel-forms just mentioned, whose dating is discussed above (pp. 109, 117). Fragments with the typical decoration are fairly common in the late fourth century groups in the Athenian Agora; Form 62.5, with standard palm-branch motifs, may date from *c.* 365.[1] The pieces with ovoid palms are presumably earlier, copying Style A.

Suggested dates: c. 350–425 or slightly later.

STYLE C (FIGS. 39 (lower motifs), 44

The scheme of decoration resembles that of Style B: palm-branches (normally five?) alternate with other motifs in a single band round the floor, flanked by fine grooves. An undecorated area of varying width is left at the centre; the few examples with decoration close to the centre may be early. The typical palm-branch motifs are triangular, as in Style B, but with the sides extended downwards on each side of the stalk, producing a dart-like shape (Type 12, etc.) Other motifs used include circles with dotted or toothed surrounds and various small geometric motifs with internal dotting or linear decoration. The stamps are fine, in keeping with the quality of the ware, with delicate relief lines and dots indicating the details. The predecessor of Style D; rather uncommon. Attested on Form 62B, in contexts of the fourth century (see p. 109); develops into Style D around the middle of the fifth century.

Suggested dates: c. 380–440.

STYLE D (FIGS. 44, 45, 47, 54)

Animal motifs (particularly birds of various kinds) and cross-monograms are the hallmarks of Style D, which is characteristic of the fine-ware dishes of Forms 82-84. It represents a continuation of Style C with, however, an almost complete change of motifs. The stamps tend to be small, with minute details composed of fine relief lines and rows of small dots (mostly in relief); the stamping is usually neat and regular. One or more narrow bands of decoration, bounded by groups of fine grooves, encircle the floor of the vessel, leaving a wide area free at the centre; this is sometimes occupied by two or more cross-monogram stamps (Type 289 or the like),

[1] See p. 109 above.

side by side. The outer bands usually consist of a single motif, most frequently a bird or a small geometric stamp, repeated many times. See PLATE XVI*c*.

Some development is to be observed. The transition from Style C is marked by the appearance of various new motifs (e.g. palmettes, trefoil patterns of Type 83, and small animals in simple outline as Type 152); generally two of these motifs alternate in a band between simple grooves (see PLATE XVI*a*). Early pieces of the main series have a similar range of predominantly geometric motifs (PLATE XVI*b*; cf. also Form 82.1–2). These are succeeded by vessels with decoration as that described above; cross-monograms now make their appearance. In some further examples, which appear to mark a late phase in the series, the subsidiary stamps are omitted, leaving one or more cross-monograms at the centre, surrounded by a series of grooves, often combined with a band of rather rough rouletting. The cross-monogram stamps of this period are sometimes large and very elaborate (see Types 300–302).

On Forms 82–84; early variant on Form 75. Fairly common. For dating-evidence, see discussion of Forms 82–84 above. The standard version is well represented in the Athenian Agora groups of the third quarter of the fifth century, along with some early pieces.

Suggested dates: c. 440–500+ (transition from Style C *c.* 430–460).

STYLE E (FIGS. 41 (bottom), 46, 48–53, 55–57)

This comprises two parallel series, found on large dishes and bowls respectively. On the former the stamps tend to be large—sometimes very large—with a single motif repeated or two or more different stamps grouped together to form a loose composition, which is bounded by a 'triple groove' or the like. On the small bowls one stamp only, generally fairly small, is used, impressed in the manner of a potter's stamp at the centre of the floor, and generally surrounded by a groove. The products of more than one factory seem to be represented, though they are not sharply differentiated. In general, this Style seems to be a continuation of Style A, though some motifs are shared with Style D. The principal elements are birds (chiefly doves) and other animals, human figures, busts, cross-monograms and jewelled crosses; a strongly Christian flavour pervades the whole. These stamps are mostly crude in comparison with Style D, being more on the level of Style A in execution; they are often very lightly impressed.[1]

On the dishes a favourite scheme is that of a large central cross or standing figure with smaller birds, lambs, busts, etc. disposed around it. The subsidiary motifs often consist of a single repeated stamp, which may at times be placed sideways or even, on occasions, be inverted. The Style may be roughly divided into an earlier and a later phase:

E (i) The style of the Oudna finds[2] and related material. Fairly common, mostly on small bowls. The main motifs are birds (mostly doves) and crosses, with some cross-monograms; some geometric patterns occur, especially on the

[1] Possibly an indication of the technique of manufacture; see p. 295.

[2] See p. 298 below.

bowls. A number of motifs (notably cross-monograms of Type 289) are shared with Style D; these are perhaps mainly early. The stamps are mostly of medium size; some have quite fine detailing. The doves have purely linear details; they and the other animals are rendered in a schematic style. On Forms 80(?), 87, 93(A), 94(?), 95–98, 99A(–B), 103A.

Dating: No examples of the style are present in Athenian Agora groups of *c.* 460–75, but the presence of Type 289 (which occurs there) in this series suggests that it evolved very shortly afterwards.

The evidence already presented for the dating of Forms 96–97 and 99A, the typical forms on which Style E (i) stamps occur, indicates that the Oudna products date mainly from early years of the sixth century, say *c.* 500–530. The parallel series of stamps on Form 93A would appear to be of similar or rather earlier date; the occurrence of the cross-in-heart stamp of Type 285 on Form 93.3 provides a direct link with Style A (iii).

Suggested date: c. 480–540.

E (ii) The common late style, found mainly on large dishes. No very hard-and-fast line can be drawn between this phase and the preceding one, particularly in the case of the bowl series. Human figures, busts and heads appear along with jewelled crosses, doves and lambs as the most popular motifs. The large stamps belong principally to this phase. In general, details are coarse, rendered by a series of lines and large dots, though the larger scale permits more naturalism in the renderings of animals and human figures. Some of the earlier stamps in the series are quite elaborate (e.g. the crosses of Types 329–330), though there is a marked tendency towards simplification on the later examples, and the rendering of human figures becomes very crude. On some of the latest pieces the decoration is reduced to a single sprawling stamp, poorly impressed.

On Forms 93B, 99B, 101, 103B, 104A–C.

Dating: See discussion of Form 104 above. Examples of the series occur in Athenian Agora groups of the second quarter and middle years of the sixth century; late ones are present in contexts down to the end of the century or the early years of the seventh. The evidence of vessel-forms and connections with the earlier series suggests that the style flourished around middle of the century, the probable date of the most elaborate pieces, and then went into decline, finally disappearing about the year 600.

Suggested date: c. 530–600 (transitional E (i)–(ii): second quarter of sixth century).

STAMP TYPES

Note: Type numbers refer to the Catalogue below. No attempt is made to separate different die-types; all examples displaying similar features are classed under a single type. Stamp types are listed under five general headings: floral and geometric (types 1–150), animals (151–213; 214–220 vacant), human figures (221–263; 264–270 vacant), canthari (271–278; 279–280 vacant), crosses and variants (281–336).

FLORAL AND GEOMETRIC

Palm-branch (*Types* **1–19**)

A basic motif in Styles A, B and C, normally found in combinations of four to nine radiating from the centre of the vessel or from a groove round the centre. Style A examples are mostly ovoid; Type **1** represents the earliest variety (A (i)), and the common Types **3** and **4** the normal varieties in A (ii). Early examples have the bottom ribs on each side turned downwards (**1–2**); lozenge-shaped varieties seem to be typical of early A (ii). Broad flat-based derivatives are present in A (iii) (**5**; cf. **6**), along with a lozenge-shaped double-palm motif (**19**) and some other varieties, though none are particularly common. The normal Style B varieties are triangular, with a short stalk (**9–11**). Those of Style C are similar, but usually dart-shaped (**12–15**); a few stamps of Styles A and B (probably late) copy them. A few large palm-stamps of Style E (ii) (**18**), used flanking a central figure, appear to have no direct connection with the earlier series.

'Petal' (**20–21**)

Rare and early; a feature of Style A (i). These elongated stamps radiate from the centre of the vessel like the petals of a flower. Circle motifs, impressed separately, normally occur within the outline.

Concentric circles (**22–29**)

A common subsidiary motif in Styles A, B and C. Normally used as a filler between the main elements of the composition, or in an outer band, either alone or alternating with another motif; occasionally also (in Style A) one at the centre. Stamps comprising single or double circles (**22–24**) are early; three to five circles are normal, and examples with six occur (**29**). In Style A, the presence of a small disk at the centre is an early feature (see **22**, **23**, **25**), and the individual circles tend to become less delicate as time goes on.

Concentric circles with dot-fringe (**30–40**)

A common subsidiary motif in Style A (ii)–(iii), with a few variants in Styles B and C. The earliest examples appear to be late fourth century. Employed as preceding series, of which it appears to be a derivative. Examples with plain dot-fringes and those with whirl-fringes are contemporaneous. The later examples tend to be large and crude.

Ring (**41–43**)

Late version of the circle motif, mostly Style A (iii). The commonest type (**41**) is toothed and rather crudely made, like the later pieces of the preceding series. Usually used alone in a band round floor of vessel.

Rosette (**44–59**)

A common subsidiary motif in Style A, early to late, used as the circle motifs above. The earliest and commonest type is composed of a series of small incuse petals (**44**); this appears in a small version (*A*) in A (i), and persists in a rather larger version (*B*) throughout A (ii), with dotted variants as **52–53**. Several other types occur, none very common. Derivatives of these, more elaborate and naturalistic, occur among

the Oudna products (**51, 56**) and on a number of early dishes of Style E (ii) of around the second quarter of the sixth century (**55, 57–59**), where they appear flanking human figures and the like.

Rosette in circle(s) (**60–66**)
A variant of the preceding, occuring late in Style A (ii) and in A (iii); employed either as a subsidiary motif or in a band round the floor. Several versions, none common; rendering of rosette normally schematic. A cross-shaped version, Type **64**, should be late, and may be influenced by Style D. For related motifs, see Types **86–89** and **286**.

Grille-pattern (**67–72**)
A common element of Style A (ii)–(iii), used as both a subsidiary and a main motif; a few examples on other contemporaries. Normally square, though some specimens are almost circular (Type **70**). The few oblong ones (e.g. **68**) may be very early. Diagonal cross-bars are rather more common than upright ones; dots between the bars are common. The later examples (A (iii)) tend to have a coarse wide mesh and rounded corners.

Crescent (**73–74**)
A subsidiary motif found in Style A from the late fourth century onwards; not very common. Used at tips of palm-branches, or between them, and sometimes in outer bands. Closely related in style to the chevron motifs which follow.

Chevron (**75–77**)
One of the basic elements of Style A (iii), normally arranged in a star-pattern either radiating from the centre of the vessel or in a band round the floor. Decoration similar to that on the palm motifs, from which it seems to be derived. Type **75**, which may begin in A (ii), is the standard variety. Early examples tend to be pointed, later ones widely splayed and straggly, with the two arms stamped separately.

Clover-leaf (**78–80**)
Fairly common on Style A pieces of late fourth–early fifth-century date; the normal version is **78**. Used both as a subsidiary motif and on its own, in various combinations.

Trefoil pattern (**81–83**)
Probably a development of the last, appearing in its characteristic form (**83**) on late examples of Style A and early ones of Style D. The very early version **81** seems unrelated to these.

Motifs in circles (**86–89**)
Single examples only, Style A (late) and Style D (early). Cf. Types **60–66**. Also found on lamps (*q.v.*).

Decorated square motifs (**90–96**)
Several versions, mostly Style A (iii) and C–D; none common. Related in style to Types **86–89**. Generally used in a band, alternating with a second motif.

Lozenge (**97–101**)
Rather uncommon; several examples, mostly Styles C and D (early). Mostly found alternating with a second motif. Dotted and similar decoration; related to preceding series.

Volute motifs (**102–4**)
Several examples, Styles C–D (early); some are elaborated lozenge motifs. Cf. also the palmettes **118–19**.

Triangles (**105–6**)
Several examples, Style D (not late). Cf. lozenge motifs above for rendering.

Heart/ivy-leaf (**107–12, 115–16**)
Mostly Style D. The development seems to be from a simple heart-shaped type (**108–9**) to one with a short stem (**110–11**), and finally to the elaborate version **112** (of Style E). Decoration is schematic; a double outline is normal. The early Type **107** appears to be unrelated. An elaborated version containing a floral or similar motif at the centre appears late in A (iii) (**115–16**; cf. **281–5**).

Palmette/leaf-spray (**117–21**)
Several versions, mostly mid–late fifth century; Styles A (iii), D, E (i). The palmettes belong to a series of small stamps rendered in simple outline (cf. **63–64**, **151** ff.), common around the middle of the fifth century; for a variant of the motif see **116** above. In Style D a leaf-spray motif with the typical dotted decoration is more common. Both normally found in a band round the floor, used alone or with a second motif.

Palm-tree (**122–4**)
Perhaps a derivative of the palmette series; Style E (ii), about second quarter of sixth century. Several examples on large dishes, flanking the main motif.

Fluted motif (**125–7**)
Fairly common on the later examples of Style D, used as a surround for the central motif. Not related to the 'petal' motif.

Lentoid/almond-shaped motif (**128–34**)
Several versions, Styles D and E (i). In Style D the motif is small, with a multiple outline and some dotted decoration; in E (i) it develops into a broad almond-shaped motif, elaborately ornamented. Used as a subsidiary motif in Style D and alone on Oudna-type bowls.

Other floral and geometric motifs (**84–85, 113–14, 135–50**)
Mostly single examples only. The widest range of these motifs occurs in Styles D and E (i). For details see Catalogue below.

ANIMALS

Hare (**151–5**)
One of the earliest animal motifs; mostly mid–late fifth century. Not common. Small and highly schematic, little more than a plain outline with the eye indicated;

on a par with **117–19**, etc. Used in a band round the floor, sometimes with a second motif.

Lion (**156–9**)

Related to the preceding. Style A (iii), late; rare. One example late in E (ii), unrelated to rest (**159**).

Stag (**160**)

One example only; Style A (iii), late.

Bull/cow (**161–2**)

Three examples, all Style E (ii); large.

Bear(?) (**163**)

Two fragmentary examples only; identification not certain. Style E.

Lamb (**164–72**)

A common motif in Style E. The earliest versions (**164–5**) consist of a simple outline, with the limbs stiffly articulated; later ones are larger and more naturalistic, with the fleece rendered by a series of raised dots and all four legs visible. A heavy tail is normal. Used both on small bowls and on dishes, in the latter case in groups flanking a central cross. The motif disappears *c.* 550.

Fish (**173–7**)

Two series, Styles D and E (ii); not common. The normal Style D version is small and schematic, with the backbone shown (**173–4**); the Style E types are larger and more true to life, perhaps representing mullet (cf. the appliqué versions of the late fourth century, p. 215). Both series are employed as subsidiary decoration.

Dolphin (**178–9**)

A rare early motif; Styles A (iii) and D (early). Used in band round floor.

Various birds (**180–93**)

Birds of various kinds are a common motif in Style D, where they usually appear in a continuous row round the floor. The stamps are small, and ornamented with fine linear and dotted decoration. They are rendered in various positions: flying, perching, swimming, etc. Many are so stylized as to be unidentifiable, but peacocks (**182–4**), partridges (**185–6**) and ducks (**187–8**) may be recognized. Most are probably of late fifth century date; a few related types occur in Style E (i). A bird-on-tree motif (**211**) is related.

Dove (**194–210**)

The normal bird motif in Style E, occurring in numerous versions on both small bowls and dishes. On dishes of Style E (ii) they are found mainly in groups of two or three surrounding a central cross, also occasionally above the heads of human figures. One example occurs on a late specimen of Style D, in an abnormal arrangement (**194**). Early ones have purely linear decoration, with a small curl to indicate the wing-base; on later ones dots are added to indicate the feathers, and

more naturalistic rendering is attempted (cf. treatment of lambs above). They are normally shown strutting. After the middle of the sixth century the rendering becomes heavy and crude.

Cock (**212–13**)
A rare motif; three examples of Style E, of two different types.

214–20: vacant

HUMAN FIGURES

Various human figures (**221–31**)
Style E (ii), apart from the odd types **221–2**. Mostly used singly or in pairs at the centres of large dishes, surrounded by smaller stamps. Individual figures tend to be large and fairly detailed. The rendering aims at naturalism; some early examples (e.g. **223A**) are quite delicate, though most are rather crude. Two popular motifs are a Bacchus with panther and amphora, rendered in classicizing style (**223–4**), and an Imperial figure with orb and sceptre (**230**). Both of these appear in several versions; their peak of popularity seems to fall in the third quarter of the sixth century, rather later than the 'saints' noted below. Other Bacchus motifs and a Cupid bearing a wineskin (**227**) also occur. Rather earlier in the sequence are the warrior figure **228** and the *orans* **231**, which may have a more specifically Christian meaning.

'Saints' (**232–42**)
A series of large robed figures bearing crosses on long staffs, related in style to the preceding. Most appear to represent saints (no specific identification is possible), though **239–40** probably depict Christ. The cross is normally held upright or diagonally in the left hand; a gesture of salutation or benediction is made with the right hand, which is raised or held across the chest. These figures are common in the earlier phases of Style E (ii), used singly or in pairs as central motifs, or flanking a central cross.

Half-length figures (**243–5**)
Rare variants of the next series; Style E (ii), etc.

Busts and heads (**246–63**)
Common subsidiary motifs in Style E (ii), normally used in pairs, flanking a central figure or cross, though a few of the larger versions appear alone (see **247, 250, 254**, etc.). Characteristic of the later phases of E (ii), replacing the floral motifs (such as **57–59**) used as fillers on the earlier ones. One of the earlier types, a male cuirassed bust (**246**), appears to represent an Imperial prince or the like; on occasions it is used together with the Imperial figure **230** noted above. The other types in the series are almost all female, showing the head and neck in profile, often with a jewelled necklace and a diadem in the hair. A variety of hairstyles are represented on these heads. Most have rather crudely rendered features; some of the later ones are very poorly executed, with detail reduced to a minimum.

264–70: vacant

CANTHARI

Cantharus (**271–8**)

Several versions, Styles D and E; none very common. The earliest (**271, 274**), which date from the middle years of the fifth century, are very simple and stylized; later ones are larger, with lobed bodies and a net-pattern or other motifs on the neck. The latest type, **278**, should belong to the second half of the sixth century. Used in various combinations, also alone.

279–80 : vacant

CROSSES AND VARIANTS

Chi-Rho/cross in heart (**281–5**)

A series of closely related types spanning the transition from Style A (iii) to Style E (i); among the earliest of the cross motifs. A double heart-shaped outline, similar to those of Types **115–16**, is normal; within this a Chi-Rho, I-X or cross is present. Used in a continuous band round the floor. Not common.

Chi-Rho (**286–8**)

Rare; about mid fifth century only, in Styles A (iii) and D. Type **286** is related to the rosettes **60–68**; **288** has the dotted decoration of the cross-monogram series. For variants, see **281–3** above.

Cross-monogram (**289–308**)

A basic motif in Style D, also common in Style E (i), normally found in a central position, sometimes in pairs or groups of three side by side. Fine dotted ornament is normal, representing stylized 'jewels'; in some cases Α and ω are added under the arms. The basic type (**289**) has a simple outline; more elaborate versions develop from it. Some late derivatives are very ornate, with widely splayed ends (**300–2**); others, of Style E(i), have circles in place of dots on the arms (**303**; cf. the crosses **322–3**). Types **289** and **303** are the commonest varieties. For an example in Style E (ii), related to crosses as **331**, see Form 104.18 (unclassified).

Plain cross (**309–312**)

Mainly Style E (i), used alone on bowls. Small, of Latin type, with single or double outline and more or less straight arms. The lightly impressed Type **309**, with a bird above, may be earliest version; the normal type is **311**. The swastika, Type **147**, should perhaps also be noted here.

Jewelled cross (**313–336**)

One of the basic motifs of Style E, supplanting the earlier cross-monogram series. A number of small varieties with varied decoration are found on small bowls of Style E (i) (Types **313–321**); larger ones with large circular, square or diamond-shaped 'jewels' (**322** ff.) are common on dishes, where they normally form the centre of the composition. Typologically earliest are crosses of fairly compact shape, with more or less straight arms, decorated with dots and small circles (**313** ff., **322**);

these may be compared with the cross-monograms and plain crosses listed above, and should belong to the early years of the sixth century. Rather later (early E (ii)) are the larger and more elaborate Types **330** and **331**, with their diamond-shaped jewels; a series of stamps of enlarged types on the bowl series are related (**327–9**). From here onwards a decline in quality sets in: the stamps become very large and sprawling, with broad splaying arms, an elongated lower member and coarser detailing—mostly large diamond-shaped jewels with central dots (Types **333–6**). These late stamps occur almost exclusively on dishes. The latest examples in the series should go down to the very end of the sixth century.

CATALOGUE OF STAMPS

Palm-branches

Type

1 Ovoid or lozenge-shaped, with bottom rib(s) on each side turned downwards. Style A (i)–(ii); mostly second-third quarter fourth century. Fairly common. Early examples (Style A (i)) tend to have two downturned ribs with a crossbar above; lozenge-shaped examples may be classed as A (ii). Used with Types 24, 26, 28, 29, 44A, 67, 69, 70A, 73, 78, 83 variant; also occasionally alone. Vessel Forms: 59A, 61A, bases as 67.

Examples: PLATE XII *a, b* (Forms 59.1, 61.4, 61.31, *q.v.*).

FIG. 38a = Form 61.31.
b Louvre MNB 3212 (base as Form 67).
c = Form 61.7.

Also: Form 59.2.

Albintimilium i fig. 104, no. 5; *Temples of Armant* pl. LXXXIII, SSFL 3; Jodin and Ponsich (1960) pl. III, 3rd row, 2; *Gallia* xxiv. 2 (1966) 451, fig. 3; others, unpublished.

2 Similar, with double central rib. Style A (ii); *c.* 350–380+. One downturned rib. Vessel Form: 67? Two examples only:

FIG. 38d Benaki Mus. (Athens) 12460 (with Type 28).
Lepcis Magna, Serapeum C 65 (with Type 69).

3 As **1**, with all ribs turned upwards. Styles A (ii) and B; once A (i). Mainly second half of fourth century. Common. Short stubby examples (as PLATE XII *b* left) may be early.
Used mainly with Types 24, 26, 27, 67, 69; less frequently with Types 4, 25, 31, 35, 36, 44A–B and variants, 49, 53, 73, 86; occasionally alone. Vessel Forms: 59A(?)–B, 60, 61A–B, 62A, 67.

Examples: FIG. 38e = Form 60.1.
f Leiden F 1955 4/18, from Oxyrhyncus (base Form 67).
g Palestine Mus., Jerusalem 31.160 (dish fr.).
39a = Form 62.1.

Also: Form 59.3, 5, 9, 12, Form 61.8–11(?), 13, 32, Form 62.3, Form 67.3(?).

JRS v fig. 24.4; *Ampurias* v (1943) pl. XVIII, fig. 40 bottom centre; *O Instituto* cxiv (1950) fig. 15 top r. and centre; *Arch. esp. arq.* 1953, p. 122, pl. II. 25; Jodin and Ponsich (1960) pls. I–II (five examples) = figs. 8a, 9c–d, 10b; unpublished frs. from Athenian Agora, Corinth, Corfu, etc.

(*Note:* some of the above are incomplete; a few could be Type 1.)

Short broad variant: Form 65.3–4 (*q.v.*). Perhaps not this ware.

4 Similar, with double central rib. Style A (ii); *c.* 350 to early fifth century. Generally ovoid; angular lozenge-shaped examples probably early (going with later examples of Type 1). Very common. Used frequently with Types 26, 27, 28, 35, 44B, 69, 71, 73; also with numerous others (noted below). Not found alone. Vessel Forms: 59A–B(?), 61A, 63, and similar dishes; 67.

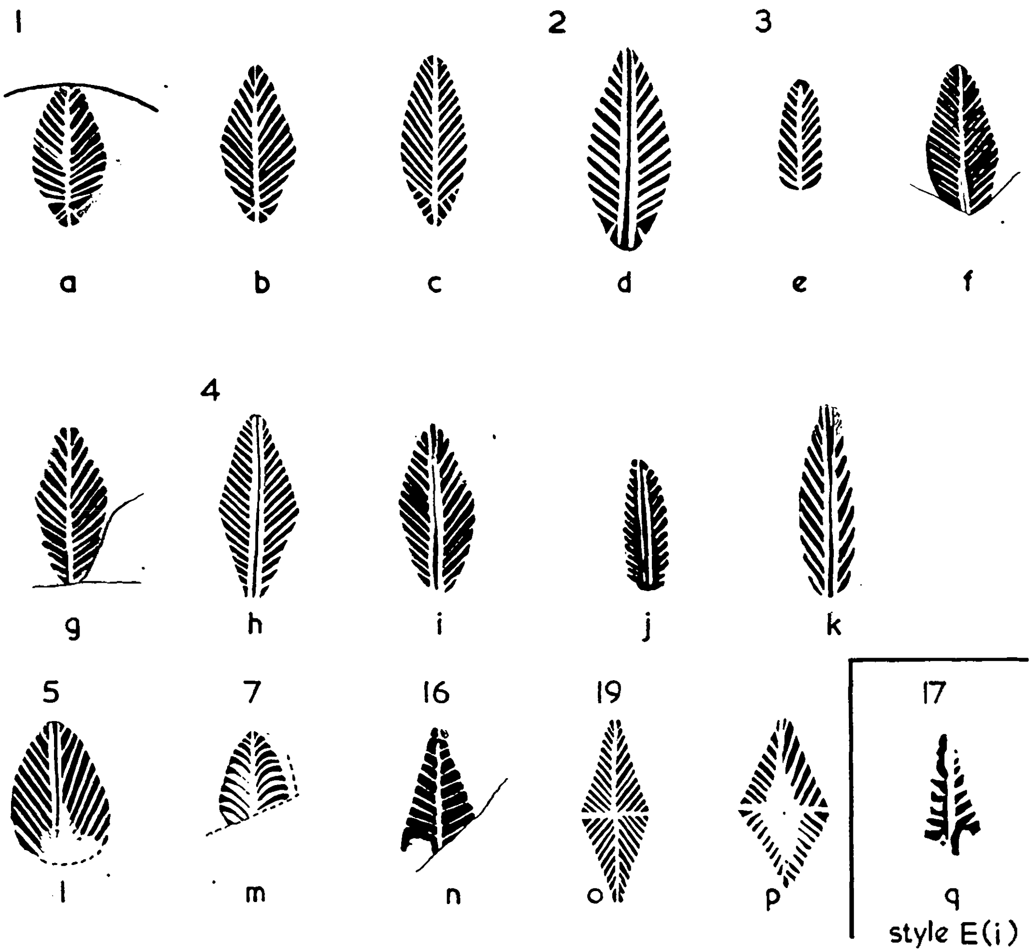


FIG. 38 Style A Scale 2:3

Type

Examples: FIG. 38h Univ. of Michigan 20986, from Karanis (Form 67 base; used with Type 52).
i PLATE XII *b*=Form 67.1.
j Palestine Mus., Jerusalem, 31.160 (with Type 3, *q.v.*).
k Athens Agora, uncat. (Form 67 base). Late?

Also: Form 59.15, Form 61.6, 12, 16, Form 63.1, Form 67.2.
CVA Coll. Mouret pl. 53.34; Zeiss (1933) 467–8, fig. 1.1, 4; Waagé (1933) nos. 148, 151, 152, 190, 192; *Ampurias* v (1943) pl. XVIII, fig. 40, top l. and top r.; *Antioch* iv. i fig. 29.5, 15; *BSA* xliv (1949) 71, no. 4, pl. 22.13; *NSc* 1949, p. 260, fig. 33 d–f; *Tarsus* i 205, figs. 163 F, G, 164 A–B; Faider-Feytmans, *Musée de Mariemont* 158, R 87, pl. 57; *Glasnik Sarajevu* xi (1956) 151, 165, pl. II, 5; Allais (1957) 41, no. 11; *Conimbriga* i (1959) 60, 67, fig. 8; Jodin and Ponsich (1960) pls. I–III *passim* (10 examples)=figs. 8 b–c, e, 9 e, g; Ettlinger, *Schaan* 247, pls. 1.16, 6.6, 12.1; *Mon. ant.* xlv (1961) 424, no. 7, fig. 59; Popescu (1965) 698, fig. 1.1; *Gallia* xxiv. 2 (1966) 451, fig. 2; numerous unpublished examples.

(*Note:* possibly a few examples of Type 2 here.)

5 Short and broad, with double central rib and flattened base; the successor of Type 4. Style A (iii); around second–third quarter fifth century. Not common. Earlier examples broad and spreading, later ones small and debased.

Examples: PLATE XV *a*=Form 61.29. Early.
FIG. 38l Benaki Mus., Athens, 12457 (with Type 286, *q.v.*). Early.

Also: Form 67.14, and the Oudna fr. *BAC* 1897, pl. VIII, 15 (both late, used alone). Cf. also Jodin and Ponsich (1960) pl. I, 2nd row, no. 3, with single central rib (Style uncertain).

6 Small and broad, with single central rib. Style C/D; first half fifth century. Used alone in band round floor.

Two examples only:
FIG. 39j Athens Agora P 27144.
Bagatti (1953) 73, pl. XVIII, no. 14.

7 As 3, but with curving leaves. Style A (iii).

One fragmentary example:
FIG. 38m Ostia 16075 (with Type 109).

8 Debased version, consisting of a 'sprig' in a rectangular field. Style A (iii).

One example only: Form 69.1 (*q.v.*).

9 Triangular or slightly dart-shaped, with a short stem below; all ribs turned upwards (as on Type 3), with herringbone pattern on stem (mostly going in opposite direction). Style B (and possibly C); mid–late fourth century+. Fairly common. The more dart-shaped examples appear to be late. Used with Types 27, 33, 38, 67, 93(?) and 180; occasionally alone. Vessel Forms: 62A (and possibly B).

Examples:
FIG. 39b = Form 62.4 (*q.v.*).
c = Form 62.9 (*q.v.*).
d = Athens Agora P 686 (with Type 27).
e = Athens Agora P 6609 (late dart-shaped version, with Type 38; Form 62A base).

Also: *Temples of Armant* pl. LXXXIII SSFL 1–2; several examples from the Athenian Agora.

10 Triangular; as Type 9, but with two or three short vertical ribs on each side at bottom. Style B; second half of fourth century. Common; the typical palm-type of Style B. Used either alone, or together with circle motifs (Types 26, 27 and particularly 28). Vessel Forms: 62A, 68.

Examples:
FIG. 39f = Form 62.5.
g Athens Agora P 178 (Waagé (1933) fig. 3, no. 220).
h = Form 62.2.

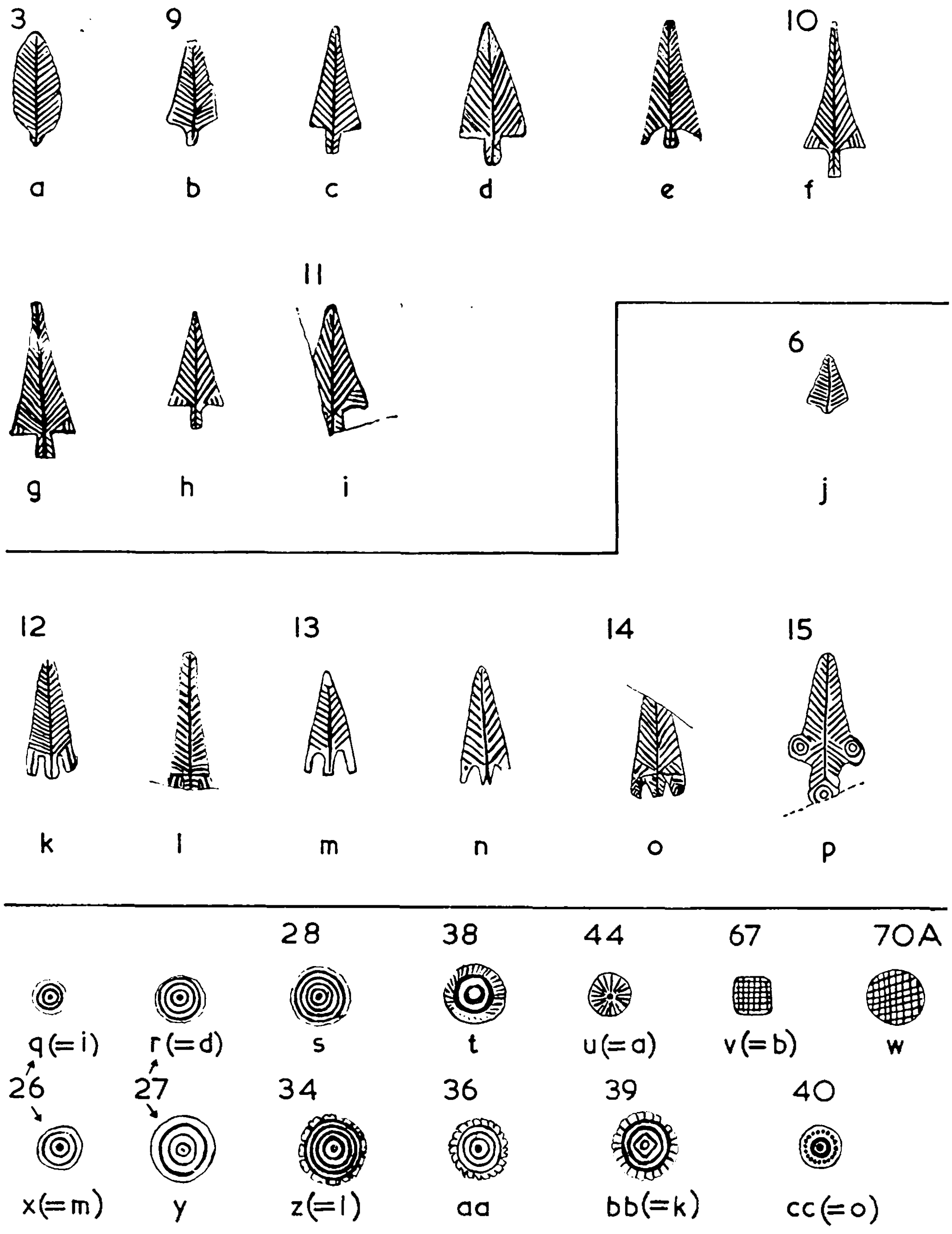


FIG. 39 Styles B and C Scale 2 : 3

Type

Also: Form 68.1, 3.

Waagé (1933) fig. 3, no. 222; Allais (1957) 41, nos. 10, 16; *Libyca* vi (1958) 262, no. 40; unpublished examples from the Athenian Agora, Corinth, Malta, Lepcis Magna.

11 As Type 9, with bottom ribs on each side turned obliquely downwards. Style B (and perhaps C); about late fourth century. Used with Types 26, 27, 36(?), 84; also alone. Vessel Forms: 62A (and perhaps B).

Examples:

FIG. 39i Athens Agora P 6751 (with Type 26). Similar: Form 62.10 (*q.v.*).

Also: two uncatalogued frs. from Athens Agora (one barbed, Style C?).

12 Dart-shaped, with ribs as on **9**, and a single rib down centre of each barb. Styles A (iii) (?), C; late fourth–early fifth century. Some examples lack the rib on the barbs, others have it elaborated into a herringbone. Development not clear. Used with Types 24, 26, 34, 35, 39, 60, 74. Vessel Forms: 62B and others.

Examples:

FIG. 39k Athens Agora P 8087 (with Type 39).

l = Form 62.15 (stamp very elongated; with Type 34).

Also: *Ogam* xvi (1964) 358, pl. 92, fig. 3 (rather elaborate); unpublished pieces from the Athenian Agora, Corfu, etc.

13 Similar, with barbs plain or bearing a single dot; stem plain. Style C. Vessel forms uncertain.

Examples:

FIG. 39m Athens Agora, uncat. (with Type 26).

n Cambridge sherd coll. AG 1165, from the Athenian Agora (used alone; dots in barbs).

Also: Corinth C–34–2427 (with Type 31).

14 Elaborate dart-shaped type; as **10**, with the addition of two barbs with herringbone decoration. Style C. Vessel forms uncertain.

One example only:

FIG. 39o Athens Agora P 7508 (with Type 40).

15 As Type 9, but with small circle motifs added at lower corners and base of stem. Style C.

One example only:

FIG. 39p Benaki Mus., Athens, 12455 (with Type 94).

16 Triangular, with short stem and slight barbs (cf. **13**); rather short and broad. Style A (iii).

One example only:

FIG. 38n Athens Agora, uncat. (with Type 32).

17 Triangular, with stem; thin and straggly. Style E (i).

One example only:

FIG. 38q Tunis, Bardo, from Oudna (unpublished) on bowl base.

18 Large palm, ovoid, flattened at bottom, with double central rib; no stem. Style E (ii), late. Used with Types 230C, 333, 334(?). Vessel Forms: 104 or similar.

Examples: *Antioch* iv.i fig. 30.7–8; *Bull. Isr. Expl. Soc.* xviii (1954) 222, pl. x, fig. 5.

19 Lozenge-shaped stamp, composed of two palm-motifs set base to base. Style A (iii); *c.* 420–450(?). Used on dishes (Form uncertain) in band round floor, alone and with Type 32.

Examples:

FIG. 38o Ostia 16074.

p Newcastle upon Tyne, from Germa area, Fezzan.

Also: Newcastle upon Tyne, from Cyrenaica; Jodin and Ponsich (1960) pl. III, row 3, left = fig. 11 c (short and broad).

'Petals'

20 Long 'petal', lentoid, with both ends pointed. Style A (i).

One example:

PLATE XII*a*=Form 61.1 (*q.v.*).

21 Long 'petal', with outer end rounded. Style A (i). Used with Types 23, 44A, 107. Vessel forms uncertain (dishes?).

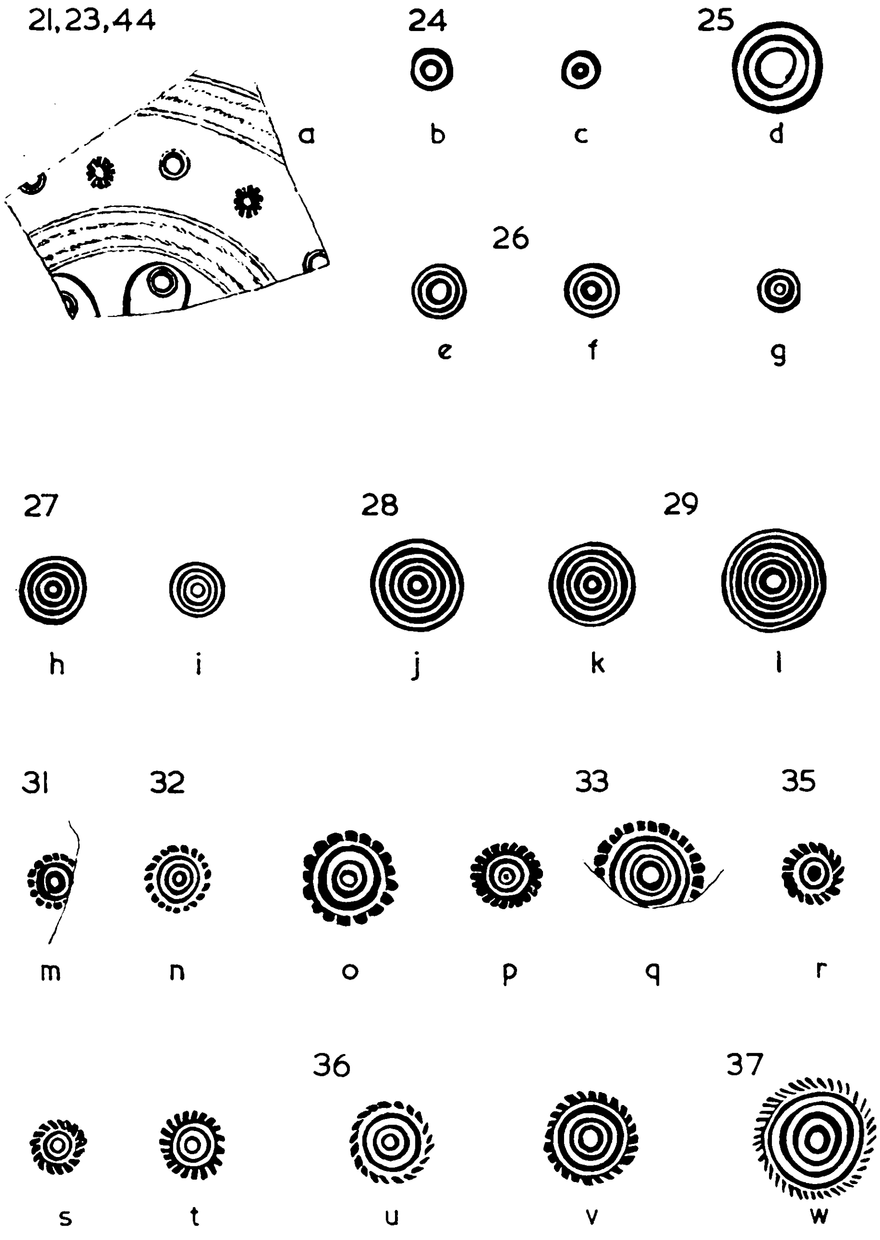


FIG. 40 Style A Scale 2 : 3

Type

Three examples:

FIG. 40a Corinth C–33–1101.

Sieglin Exped. ii. 3, p. 118, fig. 128, 14.

Excavaciones arq. en España no. 27, fig. 17.3, pl. XXXV top centre, from Ampurias.

Concentric circles

22 Small single circle. Style A (i). Used in association with 'petal' motifs (see above).
Example: PLATE XII*a*=Form 61.1; also appears on petals of the Ampurias piece cited above.

23 Two circles, enclosing a small disk at centre. Style A (i). Used with Types 21, 22, 44A.
Examples:

PLATE XII*a*=Form 61.1.

FIG. 40a Corinth C–33–1101.

Also: *Antioch* iv. i fig. 29.6; *Sieglin Exped.* ii. 3 p. 118, fig. 128.14; *Olympiabericht* vi fig. 62 left; Vatican, Museo Sacro 1329; Athens Agora, P 22764; fr. from Corfu.

24 Two small circles. Style A (ii); *c.* 350–380. Appears to be the successor of the preceding Type. Used with Types 1, 3, 4, 25–27, 36, 44, 67, 69; most commonly with Type 3.
Examples:

FIG. 40b = Form 60.1 (*q.v.*).

c Athens Agora, P 27137 (see under Type 25).

Also: *Albintimilium* i fig. 104, no. 5; *Ampurias* v (1943) pl. XVIII, fig. 40 bottom centre; Waagé (1933) no. 195; Bagatti, *Scavi di Nazaret* i fig. 79, no. 28, pl. V.2 (?=Type 23); Benaki Mus., Athens, 12444.

Later: Jodin and Ponsich (1960) pl. III, top row, 2 (with Type 75). Style A (iii).

25 Three circles, enclosing a small disk at centre. Style A (ii). Used with Types 3, 4, 24.
Examples:

FIG. 40d Athens Agora, P 27137 (Waagé (1933) fig. 3, no. 195).

e Athens Agora, uncat.

26 Three circles. Styles A (ii)–?(iii), B, C. Common. Used mainly with palm-motifs of Types 3, 4, 10; also with Types 1, 11, 13, 24, 27, 28, 31, 44A–B, 67, 69, 73, 75, 76; not found alone. Vessel Forms: 59B, 61A, 68, and probably 62, 67.
Examples:

FIG. 40f = Form 61.7, *q.v.*

g Corinth C–34–1708 (Style A).

39q Athens Agora, P 6751 (Style B, with Type 11).

x Athens Agora, uncat. (Style C, with Type 13).

Also: Form 59.10, Form 61.9–10(?), 12, Form 68.3. Zeiss (1933) 467, fig. 1.1; Waagé (1933) nos. 151, 194; *Ampurias* v (1943) pl. XVIII, fig. 40, bottom centre; *Albintimilium* i fig. 104, no. 5; *Antioch* iv.i fig. 29.9, 11; *Tarsus* i fig. 163H; Ettlinger, *Schaan* 248, pls. 6.7, 12.2; *Conimbriga* i (1959) 67; Jodin and Ponsich (1960) pls. II–III (3 examples)=figs. 10 e, 13 g; *Notic. arq. hisp.* vi (1962) pl. C, 6; *Gallia* xxiv. 2 (1966) 451, fig. 2; perhaps also Allais (1957) 41 no. 15; various unpublished examples from the Athenian Agora, etc.

27 Four circles. Styles A (ii)–(iii), B, C. Very common. Used mainly with palm-motifs of Types 4 and 10; also with Types 3, 9, 11, 24, 26, 29, 31(?), 67, 69, 71, 75, 77, 92; sometimes alone. Vessel Forms: 60, 61A–B, 62A, 67, and probably others.
Examples:

FIG. 40h = Form 61.36.

i = Form 60.1.

39r Athens Agora, P 686 (Style B, with Type 9).

y Athens Agora, uncat. (Style C, with Type 11).

Also: Form 61.11(?); Form 62.7–9.

Sellin and Watzinger, *Jericho* 163, 1b, fig. 202; *CVA Coll. Mouret* pl. 53.23; Zeiss (1933) 468, fig. 1.6(?); Waagé (1933) fig. 3, nos. 150, 198 and one other; Glasbergen (see Appendix 1, under Holland), nos. 3 and ?1; *Antioch* iv.i fig. 29.4–5; *Tarsus* i fig. 163G; *BSA* xliv (1949) 71, no. 4, pl. 22.13; Allais (1957) 41, no. 10; *Libyca* vi (1958) 262, no. 40; *Conimbriga* i (1959) 60; Jodin and Ponsich (1960) pls. I–II (4 examples) = figs. 8a, 12h;

Type

Mon. ant. xlv (1961) 424, no. 7, fig. 59; Popescu (1965) 698, fig. 1.1; various unpublished examples from the Athenian Agora, etc.

28 Five circles. Styles A (ii), B, C, ?D; mid fourth to mid fifth century. Common. Used mainly with palm-motifs of Types 4 and 10; also with Types 1, 3, 26, 44B(?), 75, 78, 90, 120; sometimes alone. Vessel Forms: 61A, 62A, 67, 68 and probably others.
Examples:
FIG. 39s Athens Agora, P 7087.
FIG. 40j Corinth C-34-2098.
FIG. k = Form 61.7.
Also: Form 61.5, Form 62.6, Form 67.8.
CVA Coll. Mouret pl. 53.34; Waagé (1933) nos. 199, 222; *Tarsus* i fig. 164 B; *NSc* 1949, p. 260, no. 100, fig. 33 d; *O Instituto* cxiv (1950) fig. 15 bottom r.; Rolland, *Saint-Blaise* i fig. 179, top l.; Allais (1957) 41, no. 16; Ettlinger, *Schaan* 247, pls. 1.16, 6.6, 12.1; Jodin and Ponsich (1960) pls. I–III (5 examples); *Gallia* xxiv. 2 (1966) 451, fig. 2; further examples in Athenian Agora, etc.

29 Six circles. Style A (ii).
Two examples only:
FIG. 40l Louvre MNB 3212 (Form 67 base; with Type 1).
Athens Agora; Waagé (1933) fig. 3 (no number)—with Type 27.

Concentric circles with dot-fringes

30 Single circle with dot-fringe. Style A (ii) or (iii).
One example only: Rolland, *Saint-Blaise* i fig. 177, bottom r. (with Type 69).
Variant with 'whirl-fringe'; Form 67.7 (*q.v.*).

31 Two circles with dot-fringe. Styles A (ii), C; late fourth to early fifth century. Used with Types 3, 4 (variant), 13, 26, 67, 69, 73. Vessel Forms: 67 and dishes.
Example:
FIG. 40m Mainz O 27656; sherd from Terenuthis, Egypt.
Also: *JRS* v (1915) 66, fig. 24.2; Waagé (1933) fig. 3, no. 194; *Antioch* iv.i fig. 29.14; *Arch. esp. arq.* 1953, p. 122, pl. II, 25; further examples from Corinth, Abu Mena.

32 Three circles, similar. Styles A (ii)–(iii); late fourth to mid fifth century. Fairly common. Late examples tend to be large. Used with Types 4, 16, 19, 72; more often alone, in band round floor. Vessel Forms: 67 and dishes.
Examples:
FIG. 40n = Form 67.6. Early.
o Athens Agora, uncat. (with Type 16). Late.
Also: Waagé (1933) fig. 3, no. 236; Rolland, *Saint-Blaise* i fig. 177; Saller, *Excavations at Bethany (1949–53)* 262, no. 2659, fig. 49, pl. 120 b, 4; Allais (1957) 41, no. 11; Jodin and Ponsich (1960) pl. III (2 examples), fig. 11c; *Madrider Mitt.* iii (1962) 111, fig. 4, no. 35; further examples from the Athenian Agora and Lepcis Magna.
Variant: FIG. 40p Athens Agora, uncat.

33 Four circles, similar. Style A (ii)–(iii). Used with Types 4, 9; also alone.
Vessel forms: include base as Form 67.
Example:
FIG. 40q Corfu, Roman Baths, EΛ60/36.
Also: Jodin and Ponsich (1960) pls. I–II (3 examples) = figs. 8c, 11a; further examples from Athens Agora and Lepcis Magna.

34 As 33, with almost continuous fringe. Style C; late fourth century.
One example only:
FIG. 39z = Form 62.15 (*q.v.*).

35 Two circles, with 'whirl-fringe' (composed of short diagonal strokes). Style A (ii); late fourth to early fifth century. Fairly common. Perhaps to be regarded as a mere variant of Type 31; the fringes of individual examples rotate in both clockwise and anticlockwise directions. Mostly rather small-sized. Used mainly as subsidiary motifs to palms of Type 4, or alternating with Type 69; also occurs with Types 3, 24 and 73. Vessel Forms: 59A–?B, 67.

Type

Examples:

FIG. 40r Tolmeita, Cyrenaica (Form 67 base; with Type 69).
s Athens Agora, P 27122 (Form 59A; with Type 4?).
t Athens Agora, uncat. (Form 67 base; used alone).

Also: Form 59.15.

Antioch iv. i fig. 29.7; *Tarsus* i fig. 163 F; *NSc* 1949, p. 260, no. 101, fig. 33e; *O Instituto* cxiv (1950) fig. 15, top l.; also Athens Agora, and Athens, Benaki Mus., unpublished.

36 Three circles with whirl-fringe. Styles A (ii)–(iii), C; about late fourth–third quarter of fifth century. Common. Cf. Type 32; late examples tend to be large. Used with Types 1, 3, 4, 69, 70, 74, 76, 77, 82, 96; variant with Type 11; also occasionally found alone. Vessel Forms: 61A, 64 and other dishes, 67.

Examples:

FIG. 40u Athens Agora uncat. (Form 67 base; with Type 3).
v Ostia 16071 (Form 67 base; with Types 4, 74, 82).
39aa Athens Agora, uncat. (Style C, with Type 11).

Also: Form 61.15, Form 64.2.

Clerc and d'Agnel (1904) 83, pl. VIII, 9; *O Instituto* cxiv (1950) fig. 15 centre; *Antioch* iv.i fig. 29.10; *Tarsus* i fig. 163 E; Jodin and Ponsich (1960) pls. I, row 3, 2; II, row 4, 4=fig. 8b; *Mon. ant.* xlv (1961) 424, no. 6, fig. 59; Baradez (1961) pl. III, 3, 8; Aharoni, *Ramat Raḥel, 1959–60*, fig. 18.9; *Gallia* xxiv. 2 (1966) 451, fig. 3; further examples from Athens Agora, Corinth, Tocra (Cyrenaica).

37 Four circles with whirl-fringe. Style A (iii); mid fifth century or thereabouts. Mostly large and crude. Cf. Type 33. Used alone, in band round floor, and with Types 69, 70, 75, 117.

Example:

FIG. 40w Ostia 16073 (base as Form 61B, late; used alone).

Also: Rolland, *Saint-Blaise* i fig. 177 centre; *Mon. ant.* xlv (1961) 424, fig. 59 left; Baradez (1961) pl. III, 4; unpublished examples from Apollonia, Cyrenaica.

38 Dot and circle, surrounded by fringe of fine rays. Style B; probably early fifth century. Used with Type 9, or alone. Vessel Form: 62A.

Example:

FIG. 39t Athens Agora, P 6609 (Form 62A, with Type 9).

Also: Waagé (1933) no. 147; Allais (1957) 41, no. 14; further examples from Athens, Agora.

39 Circles with toothed fringe, with square and circles at centre. Style C.

One example only:

FIG. 39bb Athens Agora, P 8087 (dish fr.; with Type 12).

40 Dot and circle, surrounded by a row of dots (all in relief). Style C.

One example only:

FIG. 39cc Athens Agora, P 7508 (dish fr.; with Type 14).

Rings

41 Toothed ring (as the above, with circles omitted). Styles A (ii)–(iii); about early–mid fifth century. Normally alone, in band round floor. Vessel Form: normally 61B.

Examples:

FIG. 41a Olympia=*Olympiabericht* vi fig. 62 top r. (variant, with Type 4(?); perhaps Form 67).
FIG. 41b = Form 61.33.
c = Form 61.35.

Also: Form 61.34; *Arch. esp. arq.* 1953, p. 123, pl. II, 32; Jodin and Ponsich (1960) pl. I, row 4, 3=fig. 11b.

42 Plain ring. Style A (iii).

One example only:

FIG. 41d PLATE XV*a*=Form 61.29 (with Type 5).

43 Four circles. Style A (iii).

One example only.

FIG. 41e = Form 61.30 (with Type 70).

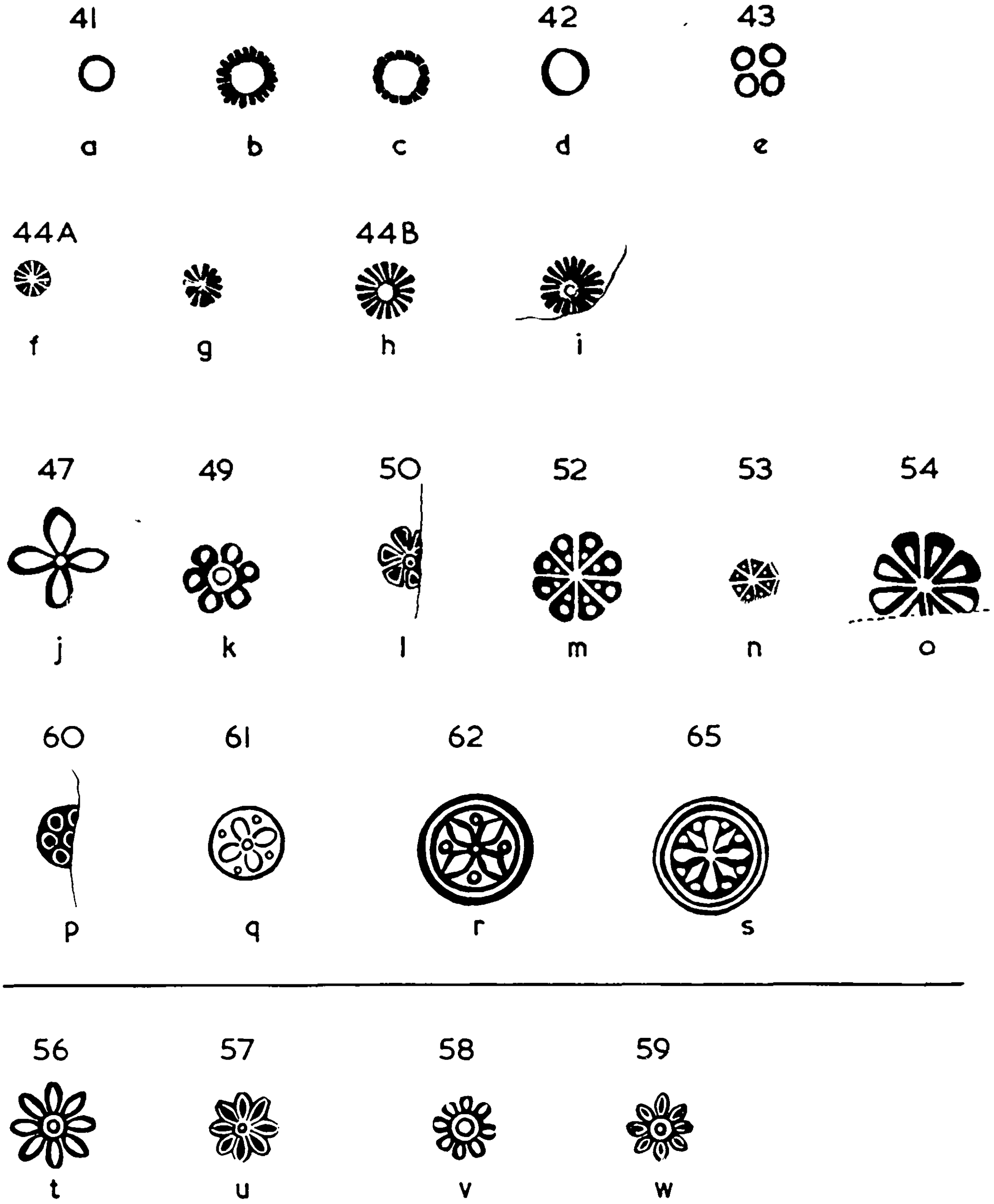


FIG. 41 Style A (bottom row Style E) Scale 2 : 3

Rosettes

Type

44 Rosette, composed of incuse wedges. Styles A (i)–(ii), mainly second–third quarter of fourth century. Common.

Two stages may be distinguished:

A small: D. *c.* 7–8 mm. Style A (i).

B rather larger: D. 1.0 cm., or larger. Style A (ii).

Used frequently with palm-motifs of Types 1 and 4; also with Types 3, 21, 23, 24(?), 26, 28, 67, 68, 69, 81. Vessel Forms: 59A–B, 61A, 67 (especially Form 59).

Examples:

PLATE XII *a,b*=Form 59.1, Form 61.4.
FIG. 41f = Form 61.2 (*q.v.*).
g = Form 59.9 (Type 44A).
h = Form 59.11 (Type 44B).
i = Corinth C–37–1565 (variant of B; with Type 4; Form 67 base).

Also: Form 59.2–4, 10, Form 61.2, 16, Form 67.2.

Bisson de la Roque, *Medamoud 1929*, fig. 63, inv. 3439bis 7; Waagé (1933) nos. 152, 190, 192, 197; *Antioch* iv.i fig. 29.6, 9; A. el-Mohsen, *Ptolemaic and Roman Baths of Kom el-Ahmar* pl. XXXII bottom l.; Ettlinger, *Schaan* pls. 6.6, 12,1(?); Jodin and Ponsich (1960) pls. I and III (4 examples)=figs. 8e, 10b, e; Bagatti, *Scavi di Nazaret* i fig. 79, no. 28, pl. V, 2; various unpublished examples. Perhaps also Zeiss (1933) 468, fig. 1.4.

Wheel-like variant, with fine relief 'spokes' and small central knob (Style B, early, third quarter fourth century(?)):

FIG. 39u = Form 62.1.

Similar: Form 62.3.

45 Whirl-rosette, with central dot. Style A (ii).

One example only:

Athens Agora, P 175=Waagé (1933) fig. 3, no. 196 (with Type 4).

46 Small six-petalled incuse rosette. Style A; perhaps early, related to Type 44A.

One example only:

Form 65.1, *q.v.*

47 Four-petalled, with petals in simple outline. Style A (iii).

Example:

FIG. 41j Corfu, Roman Baths (Form 67 base, with Type 4).

Also: Form 76.2 (single stamp at centre).

Variant, with leaf-shaped petals: Jodin and Ponsich (1960) pl. I bottom l.=fig. 10f.

48 Similar, with four circles between petals. Style A (iii). Late version of Types 61–62?

One example only:

Tipasa; Baradez (1961) pl. IV, 6 (Form 67 base; with Type 75).

49 Six-petalled, with circle at centre. Style A (ii). Used with Types 4, 69. Vessel forms uncertain.

Example:

FIG. 41k Athens Agora, uncat.

Also: Jodin and Ponsich (1960) pl. II bottom row, 3=fig. 12a; Lepcis Magna, Serapeum C 14.

Variant: *O Instituto* cxiv (1950) fig. 15, top r. (with Type 3).

50 Similar, with outline of petals in relief, and central dot. Style A (iii)?

One example only:

FIG. 41l Mainz RGZM, under O 17557 (Form 67 base).

51 Six-petalled, with pointed petals; no central motif. Style E (i)?

One example only:

Oudna; *BAC*, 1897, pl. VIII, 8.

52 Eight-petalled; petals incuse, each bearing two dots. Style A (ii) (*c.* 360–380?).

One example only:

FIG. 41m Univ. of Michigan 20986, from Karanis (Form 67 base; with Type 4).

Type

53 Similar, smaller, with one dot in each petal. Style A (ii), early.
Two examples:
Form 59.12 (*q.v.*) (rounded petals).
FIG. 41 n Corfu, Roman Baths (square-ended petals).

54 Large eight-petalled rosette; petals in simple outline. Style A (iii); mid fifth century+. Cf. Type 47.
Example:
FIG. 41 o = Form 93.1 (stamps on rim).
Also: Saller, *Excavations at Bethany (1949–53)* 261, no. 3079, fig. 49 (Form 67 base); Corfu, Roman Baths (with Type 75?).

55 Rosette with eight pointed petals, in simple outline, with circle at centre: Style E (ii), early.
Examples:
Form 104.1 (*q.v.*); Popescu (1965) 698, fig. 1.8; perhaps also *Nessana* i pl. LIX, A5.

56 Similar, with two circles at centre. Style E (i)?
One example only:
FIG. 41 t Oudna; *BAC*, 1897, pl. VIII. 4 (base as Forms 96–97).

57 Similar, with petals in relief; relief dot and circle at centre. Style E (ii), early.
One example only:
FIG. 41 u Mainz O 34832, from Carthage region (Form 103/104A base; with Types 124, 251).

58 Rosette with eight small rounded petals, in outline, and two circles at centre (cf. Type 56). Style E (ii); second quarter of sixth century.
Example:
FIG. 41 v PLATE XVII *b*=Form 104.4 (*q.v.*).
Duplicate: *Mat. şi cerc. arh.* viii 678, fig. 5. Variant (7 petals, circle and dot at centre; Style A (ii)?): Jodin and Ponsich (1960) pl. I, top row, no. 3=fig. 9b (with palm-motif).

59 Similar, with centres of petals hollowed out. Style E (ii).
One example only:
FIG. 41 w British Museum 1963. 7–4.1 (see under Type 240).

Rosettes in circles

60 Six circles round a central circle, in relief, on a circular ground. Style A (iii).
Example:
FIG. 41 p Corfu, Roman Baths (with variant Types 11/12).

61 Four-petalled, with circles between petals (as Type 48), surrounded by a circle. Style A (ii). Used with Type 4. Vessel-forms uncertain.
Two examples:
FIG. 41 q Athens Agora, P 8010.
Ampurias v (1943) pl. XVIII, fig. 40, top left.

62 As last, with two circles. Style A (ii). Used with Types 71, 78–79. Vessel Form: 67.
Three examples:
FIG. 41 r Benaki Mus., Athens, 12453.
Athens Agora, P 12301; Delattre (1893) 39, no. 52.

63 Small eight-petalled rosette, surrounded by two circles. Style A (iii)/E (i). Used in band round floor.
One example:
Rolland, *Saint-Blaise* i fig. 181 left (with Type 118).

64 Similar, with four pairs of petals, forming a cross-pattern. Style A (iii)/E (i).
One example:
Ibid. fig. 181 right (used alone).

65 Rosette with eight petals (four rounded, four pointed), with dots between tips, in two circles. Style A (iii). Used in band round floor.
One example:
FIG. 41 s Tunis, Bardo, from Carthage (dish base; with Type 92).

Type

66 Six-petalled, within a circle. Style: perhaps A (iii).
One example:
Sellin and Watzinger, *Jericho* 163, 1e, fig. 202.

Grille-patterns

67 Square grille, with vertical and horizontal cross-bars. Styles A (ii)–(iii), B, D (early); *c.* 350–450. Common. Late examples of Style A tend to have a large crude mesh. Corners generally rounded. Used mostly with palm-motifs Types 3, 4; also with Types 1, 9, 24, 26, 27, 31, 44B, 73 and 120 (=Style D); occasionally alone. Vessel Forms: 59A, 61A, 62A, 67, 83.
Examples:
PLATE XVI *b*=Form 83.2. Style D.
FIG. 42a Corfu, Roman Baths (1961). Style A.
FIG. 39v = Form 62.4 (*q.v.*). Style B.
Also: Form 59.5, Form 61.11, Form 67.2, 13. *JRS* v (1915) 66, fig. 24.4; Zeiss (1933) 468, fig. 1.6; Waagé (1933) fig. 3, no. 148; *Ampurias* v (1943) pl. XVIII, fig. 40, bottom centre; *Arch. esp. arq.* 1953, p. 122, pl. II, 25; Ettlinger, *Schaan* 248, pls. 6.7, 12.2; Jodin and Ponsich (1960) pl. II, bottom row, 4; further examples from Athens Agora, Corinth, Corfu, etc.

68 Small and oblong, with diagonal cross-bars. Style A (ii), probably early.
One example:
Bisson de la Roque, *Medamoud 1929* 63, fig. 63, inv. 3439 bis 7 (with Types 3?, 44B, etc.).

69 Square, with diagonal cross-bars. Style A (ii)–(iii). Common. Late examples tend to be large, and have a large mesh. Used with palm-motifs, or alternating with a second motif, or alone in band round floor. Occurs with Types 1, 3, 4, 24, 26, 27, 30, 31, 35, 36, 37, 49, 75, 83. Vessel Forms: 61, 64, 67.
Examples:
FIG. 42b PLATE XIV *b*= Form 64.1 (*q.v.*).
c Tolmeita, Cyrenaica (see under Type 35).
d = Form 61.13.
Also: Form 61.8(?), 13, Form 67.3(?), 10. Sellin and Watzinger, *Jericho* 163, 1b, fig. 202; *JRS* v (1915) 66, fig. 24.2; Waagé (1933) fig. 3, nos. 189, 197; *Antioch* iv.i fig. 29.4, 7, 14; *Albintimilium* i fig. 98, no. 29, and fig. 101, no. 3; Glasbergen (see Appendix I, under Holland) no. 2; *O Instituto* cxiv (1950) fig. 15, top left; Rolland, *Saint-Blaise* i fig. 177; Allais (1957) 41, no. 15; *Glasnik Sarajevu* xi (1956) 151, 165, pl. II, 5; Jodin and Ponsich (1960) pls. I–III (4–5 examples), figs. 9d, 11d, 12a; Aharoni, *Ramat Raḥel 1959–60*, fig. 18.9; *Mon. ant.* xlv (1961) 424, no. 6, fig. 59; *Gallia* xxiv. 2 (1966) 451, fig. 3; various unpublished examples.

70 Similar, circular. Two versions:
A with fine details; Styles A (ii) and B. Variant of Type 67.
B crude, with wide mesh; Style A (iii). A degenerate version of the preceding Types.
Examples:
A FIG. 39w Athens Agora, uncatalogued.
42e Tunis, Bardo, from Henchir es-Srira=*Cat. Alaoui*, 1910, no. 668 (dish; with Type 3).
Also: Jodin and Ponsich (1960) pl. I bottom r.=fig. 12e; pl. III, third row rt. (with Types 1 and 73).
B FIG. 42f = Form 61.30, *q.v.*
Also: Tocra, Cyrenaica (Form 67 base; with Type 36).

71 As **69**, with dots between the bars. Style A (ii); late fourth to early fifth century. Fairly common. Used with Types 3, 4, 26, 27, 62, 75, 78, 79, 80. Vessel Forms: 61, 63, 67.
Examples:
FIG. 42g = Form 63.1.
h PLATE XIII *b*=Form 67.9.
i Athens Agora, uncat.

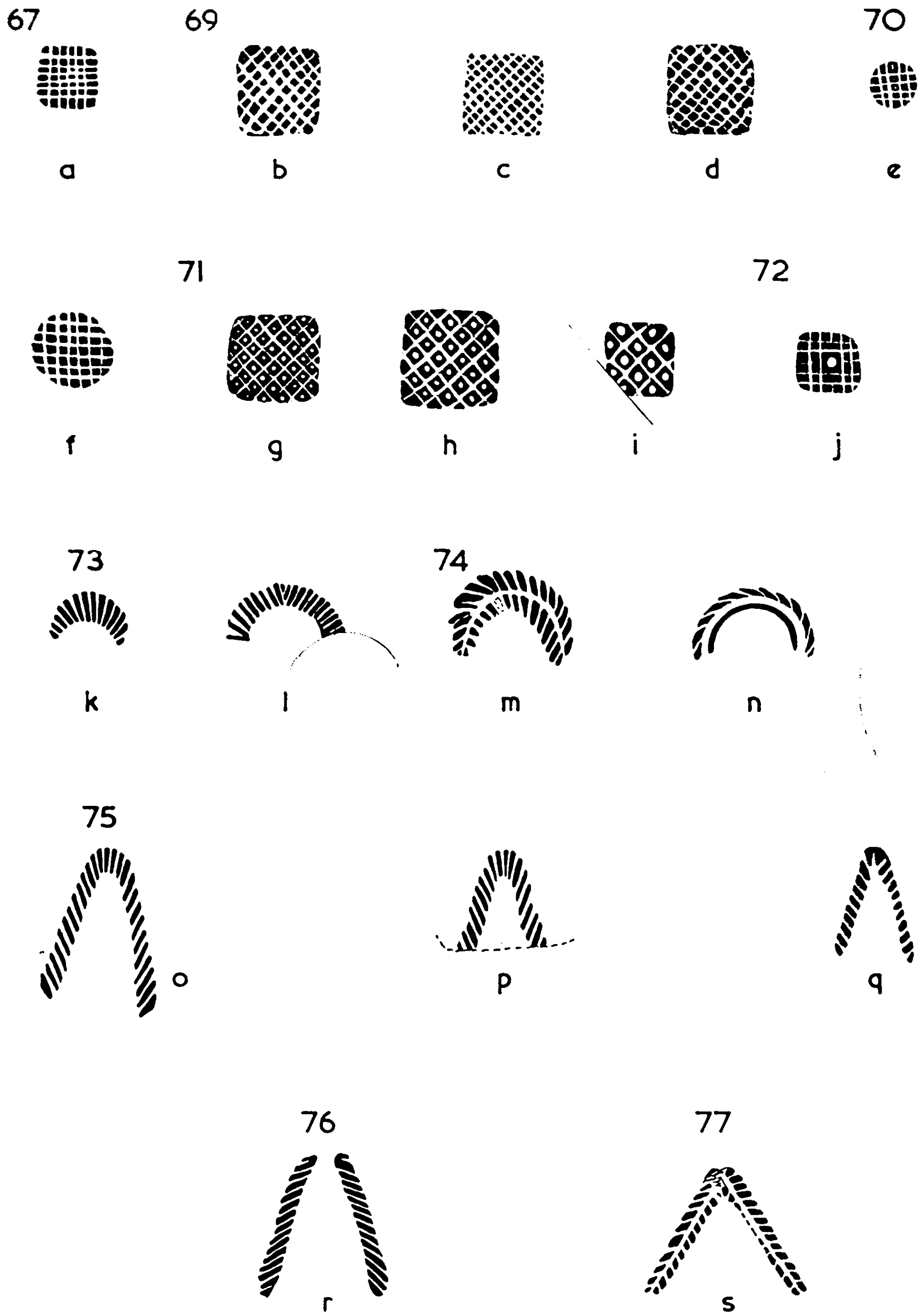


FIG. 42 Style A Scale 2 : 3

Type

Also: Form 61.12.

Serra Viladó, *Excavaciones en la necrópolis romano-cristiana de Tarragona* (1928) pl. XXXIX, 17; *NSc* 1949, p. 260, no. 102, fig. 33f; *Antioch* iv.i fig. 29.8; Jodin and Ponsich (1960) pl. I (3 examples, including circular version) fig. 9e, g; further examples from Athens Agora, Corfu and Alexandria(?) (Benaki Mus. 12453).

72 As **67**, with cross-bars broken and dot at centre. Style A (ii).

One example:

FIG. 42j Athens Agora, P 7612 (with Types 4, 32).

Crescents

73 Formed of a series of radiating lines. Style A (ii)–(iii); late fourth–mid fifth century or later. Various stamps; late examples rather crude. Used with Types 1, 3, 4, 31, 35, 67, 70A, 86; also alone. Vessel Forms: 61A, 67.

Examples:

FIG. 42k Leiden F 1955 4/18, from Oxyrhyncus.

l Athens Agora, uncatalogued; Waagé (1933) fig. 3, no. 200.

Also: Form 59.10(?), Form 61.6, Form 67.15.

Antioch iv.i fig. 29. 13(?), 15; *Temples of Armant* pl. LXXXIII, SSFL 3; *NSc* 1949, p. 260, no. 101, fig. 33e; *Arch. esp. arq.* 1953, p. 122, pl. II, 25; Jodin and Ponsich (1960) pls. I–III (3 examples, including late), fig. 11d.

74 In form of a leaf-spray, with central stalk. Style A (ii)–(iii). Used with Types 4, 12, 36, 75, 82. Vessel Form: 67.

Examples:

FIG. 42m Ostia 16071.

n = Form 67.12.

Also: *Tarsus* i fig. 164 A; Athens Agora, uncat.

Variant, crescent with dotted grille-pattern (Style A (iii)): Jodin and Ponsich (1960) pl. I, bottom row, 2.

Chevrons

75 Formed of two converging lines of strokes facing diagonally upwards. Style A (ii)?–(iii); first half fifth century. Fairly common. Normally in a band, alternating with a second motif: Types 24, 26, 27, 28, 48, 69, 71, 74. Also used alone. Vessel Form: 67, dishes.

Examples:

FIG. 42o Apollonia, Cyrenaica (with Type 69).

p Araq el-Emir, Jordan (1961) (Form 67 base; with Type 69).

q = Form 67.12.

Also: Form 67.11.

Sellin and Watzinger, *Jericho* 163, 1c, fig. 202; Serro Viladó, *Excavaciones en la necrópolis romano-cristiana de Tarragona* (1928) pl. XXXIX, 17; *Antioch* iv.i fig. 29.12; *Libyca* vi (1958) 262, fig. 40; Jodin and Ponsich (1960) pls. II–III (3 examples), fig. 13g; Baradez (1961) pl. IV, 6; *Notic. arq. hisp.* vi (1962) pl. C, 6; further examples from Apollonia (Cyrenaica) and Corinth.

76 Similar, with strokes pointing diagonally downwards. Style A (iii). Normally in a band round floor, alternating with a second motif; used with Types 26, 27, 36. Vessel Form: 64, possibly also bowls.

Examples:

FIG. 42r Athens Agora, P 27138=Waagé (1933) fig. 3, no. 198 (dish; with Type 27).

Also: *Tarsus* i fig. 163 H; Allais (1957) 41, no. 13.

77 Formed of two converging leaf-sprays. Style A (iii).

Two versions:

A with sprays pointing upwards: *CVA Coll. Mouret* pl. 53.23 (with Type 27).

B with sprays pointing downwards:

FIG. 42s = Form 64.2 (*q.v.*).

Mon. ant. xlv (1961) 424, no. 8, fig. 59 (with Type 36).

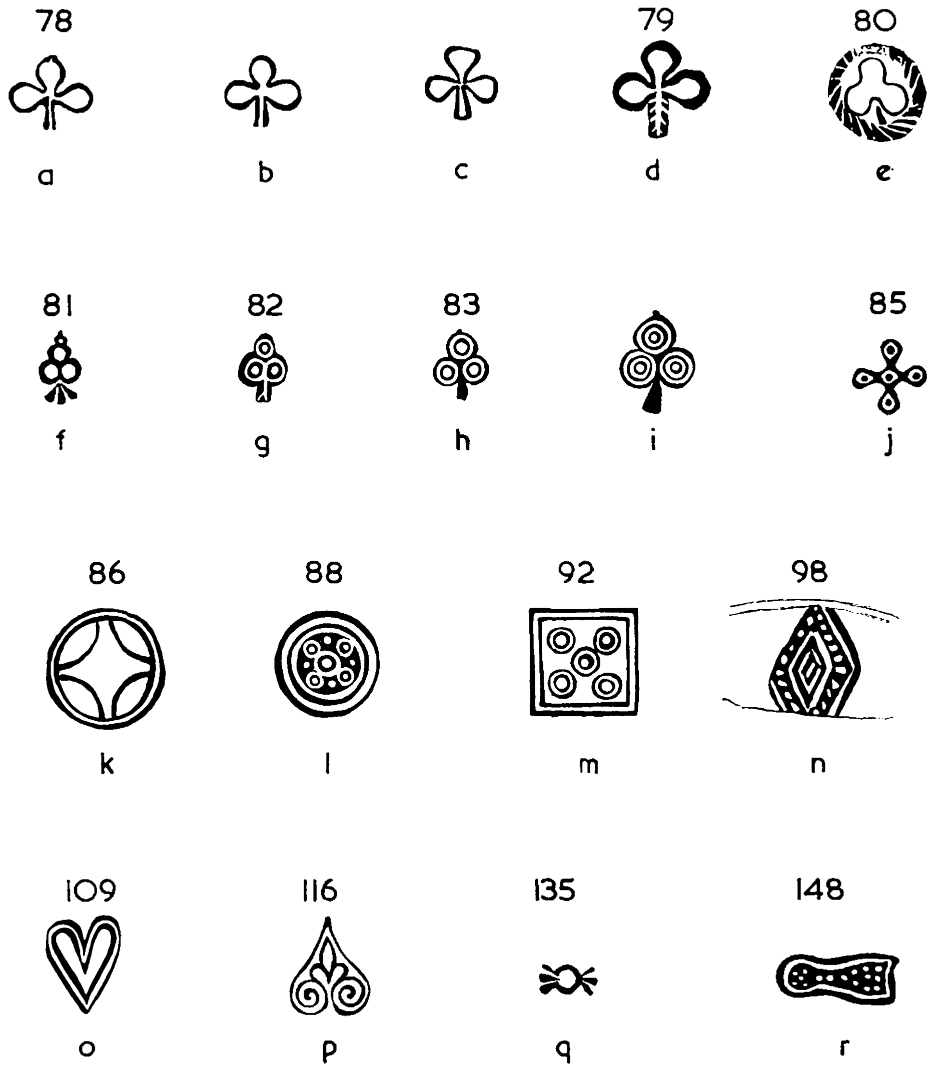


FIG. 43 Style A Scale 2 : 3

Clover-leaves

Type

78 Simple clover-leaf (often with small knob at top). Style A (ii); mainly late fourth century. Fairly common. Rounded leaves. Used most commonly with Types 4 and 71; also with Types 1, 28, 62. Vessel Forms: mostly 67.
Examples:
FIG. 43a PLATE XII*b*=Form 67.1, *q.v.*
b Louvre MNB 3195–11 (with Type 1).
Also: *Antioch* iv.i fig. 29.8 (slender variant); further examples from the Athenian Agora.
Variant with flattened top (Style A (ii)):
FIG. 43c Corfu, Roman Baths (Form 61B; with Types 4?, 85).

79 Similar, with herringbone pattern on stem. Style A (ii). Vessel Form: 67.
Two examples:
FIG. 43d Benaki Mus., Athens, 12447, from Alexandria(?) (used alone).
Benaki 12453 (with Types 62, 71).

80 Clover-leaf, enclosed by a whirl-fringe. Style A (ii)/(iii); early fifth century.
One example:
FIG. 43e PLATE XIII*b*=Form 67.9 (*q.v.*).

Trefoil patterns

81 Three circles on a short triple stem, with smaller circle and dot above. Style A (i).
One example only:
FIG. 43f = Form 61.2 (*q.v.*).

82 Three dot-and-circle motifs on a stem, in relief. Style A (ii), late.
One example:
FIG. 43g Ostia 16071 (Form 67 base; with Types 4, 36, 74).

83 Three double circles (in relief), with knob at top and short stem below. Styles A (ii)/(iii), C/D; mainly first half of fifth century. Used with Types 69, 96, 118, 152, 289. Vessel Forms: 67, 75.
Examples:
PLATE XVI*a*=Form 75.1.
FIG. 43h Athens Agora P 22248 (with Type 95).
i = Form 67.10.
Also: *Gallia* xviii (1960) 300, fig. 20; Bagatti (1953) 73, pl. XVIII, no. 16; further example from Athens Agora.
Variant:
FIG. 44a Athens Agora, uncat. (with Types 1, 4).

84 *Trefoil* of three radiating 'petals', in relief, with filled centres. Style C.
One example:
FIG. 44b Athens Agora, uncat. (with Type 11).

85 *'Propeller'-shaped motif,* with four arms; small circle at centre and at end of each arm. Style A (ii)?
One example:
FIG. 43j Corfu, Roman Baths (Form 59B; with Types 4?, 78 variant).

Motifs in circles

86 Two circles, with four inscribed arcs. Style A (ii).
One example:
FIG. 43k Leiden F 1955 4/18, from Oxyrhyncus (Form 67 base; with Types 3, 73).

87 Similar, with small circle at centre. Style D (early).
One example:
FIG. 44c Philadelphia, Univ. of Pennsylvania 49–32–172, from Athens Agora (with Type 178).

88 Two circles, enclosing five circle-and-dot motifs in quincunx pattern with dots between. Style A (iii), early.
One example:
FIG. 43l Benaki Mus., Athens, 12459 (Form 67 base, with Type 4).

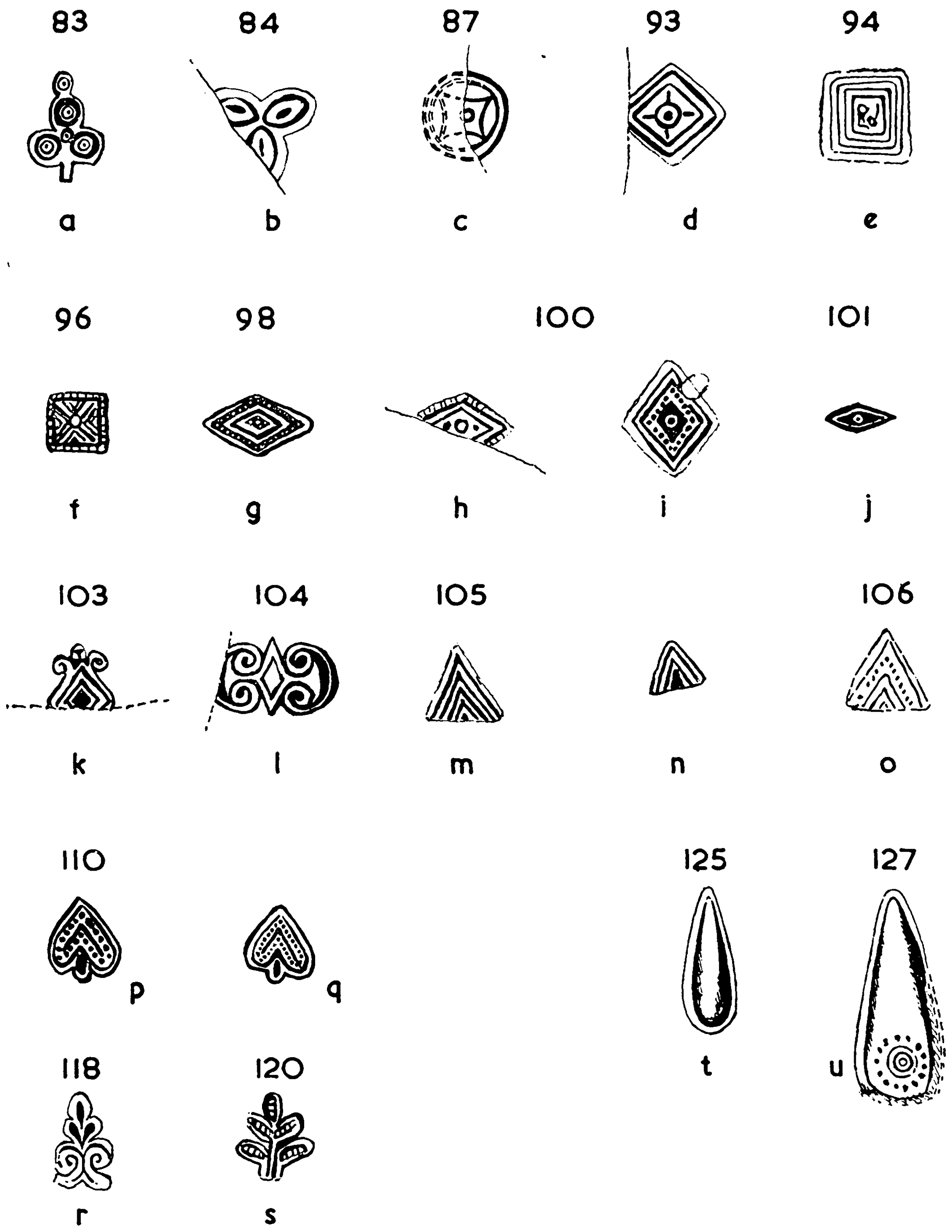


FIG. 44 Styles C and D Scale 1 : 1

Type

89 Two circles, embracing two small double circles and two small single circles. Style A (iii)?
One example:
JRS v (1915) 66 fig. 24.4 (used alone).

Decorated squares

90 With inscribed square and hatched corners; two circles flanked by four dots at centre. Style A (ii)/(iii); early fifth century.
One example:
Form 67.8 (*q.v.*).

91 With three circles at centre, and arcs filling corners. Style A (ii).
One example:
Ampurias v (1943) pl. XVIII, fig. 40, top right (with Type 4).
Variant (Style A (iii)/E): Clerc and d'Agnel (1904) 83, pl. VIII. 6=*Bull. soc. antiq. France*, 1945–1947, pl. II, fig. 1b (with Type 310).

92 With five double circles in quincunx pattern; double frame. Style A (iii).
Two examples:
FIG. 43m Tunis, Bardo, from Carthage (dish base; in band round floor, with Type 65).
Jodin and Ponsich (1960) pl. II bottom l.=fig. 12 h (with Type 27).

93 With 'propeller' motif at centre; double frame. Style C?
One example:
FIG. 44d Athens Agora, uncat. (with palm-motif of uncertain type).
Variant: Athens Agora, uncat. (with Type 9/10?).

94 Series of inscribed squares with blobs at centre. Style C.
One example:
FIG. 44e Benaki Mus., Athens, 12455, from Alexandria(?) (with Type 15).

95 Divided by diagonal cross, with hatching in each quadrant. Styles A?, C?.
Examples:
Baradez (1961) pls. IV. 3 (with palms, unclassified), III. 10 (with Type 4?).

96 With circle at centre and sets of V–s on each side; double frame, with short cross-strokes. Style D. Vessel-forms: bases as Forms 82–84.
Example:
FIG. 44f Athens Agora, P 22248 (with Type 83).
Similar: Agora P 20377a.

Lozenges

97 With small lozenge at centre, surrounded by row of dots. Style A (ii); early fifth century.
One example:
Form 61.15 (*q.v.*).

98 Similar, with two small lozenges and dot at centre. Style C. Minor variations from piece to piece. Vessel Forms: 62B, etc.
Examples:
FIG. 44g = Form 62.14.
h Athens Agora, P 12048 (with Type 141).
Coarse variant (Style A): FIG. 43n Corinth C–36–1632.

99 Similar, more elaborate, with lozenges and lines of dots alternating. Style C.
One example:
Tarsus i fig. 165 E (with palm, Type 12 or 13).

100 With double frame, enclosing row of dots and small lozenge and central dot. Style C?
One example:
FIG. 44i Mainz, RGZM O 17553, from Egypt (with Type 136).

101 Double lozenge, with circle at centre. Style D.
Example:
FIG. 44j = Form 84.5 (*q.v.*). Cf. Baradez (1961) pl. III.2.

Volute motifs

Type

102 Two opposed double volutes, with small circle at centre. Style C/D. Used with Type 114; also alone.

Baradez (1961) pl. III, 13; *Temples of Armant* pl. LXXXIII, SSAbG 3.

103 Set of lozenges, with volute attachments flanking small knob at each end. Style D? Used alone(?)

Examples:

FIG. 44k Athens Agora P 22247=Waagé (1933) fig. 3, no. 149.

Also(?): Roeder, *Hermopolis* pl. 82 v.

Type 102/103 variant; Form 103.9 (*q.v.*). Double volutes in relief, with small lozenge and dot at centre.

104 Double lozenge flanked by two *pelta* motifs. Style D. Vessel Form: base as Forms 82–84.

One example:

FIG. 44l Ithaki, Greece=*BSA* xxxix (1938–39) 36, fig. 18, no. 55 (one motif repeated, in narrow band).

Triangles

105 Set of small triangles, one within another. Style D. Used with Types 151 (variant), 289. Vessel-forms: 84, etc.

Examples:

FIG. 44m Corinth, CP 1617.

n Athens Agora, uncat.

Also: Mainz RGZM O 17545, from Egypt.

106 Similar, incorporating row of dots. Style D.

One example:

FIG. 44o Benaki Mus., Athens, 12466, from Alexandria(?) (see Type 211).

Hearts/ivy-leaves

107 Small simple heart. Style A (i).

One example:

Excavaciones arq. en España no. 27, fig. 17.3, pl. XXXV top centre, from Ampurias (with Type 21).

108 Similar, split open down centre. Style A (iii)?

One example:

Antioch iv.i fig. 29.13 (with Types 73?, 149).

109 Heart with double outline. Style A (iii).

One example:

FIG. 43o Ostia 16075 (with Type 7).

110 Ivy-leaf with short stem and filling of lines and rows of dots. Style D; mid–third quarter fifth century. Used alone, repeated in band. Vessel Forms: 82A, 84.

Examples:

FIG. 44p = Form 82.1.

q Athens Agora, P 501.

Also: further example from Athens Agora.

111 Ivy-leaf with double outline and short stem. Style D. Used with Types 289A, 293. Vessel-forms uncertain (? 82–84).

Examples:

De Waal (1904) 311, no. 2, pl. III, 3; *Tarsus* i 205, fig. 164 D.

112 With toothed surround, barred stem, and decoration of a dot-and-circle and two small circles. Style E (i)/(ii); second quarter–mid sixth century. Vessel Forms: 99B.

Examples:

FIG. 46a = Form 99.14. Form 99.19 identical.

b Ephesus (in museum).

Also: *Antioch* iv.i fig. 30.2.

Type

113 *Small leaf,* enclosing almond-shaped motif, dotted; short stem. Style D? Used alone, in narrow band.
One example:
Bagatti (1953) 73, pl. XVIII, no. 15, from Siyar el-Ghanem.

114 *Small trefoil in circles.* Styles C/D?
One example:
Baradez (1961) pl. III, 13 (with Type 102).

Motifs in hearts

115 Palm-motif in heart with double outline. Style A (iii).
One example:
Iacopi, *L'antro di Tiberio a Sperlonga* fig. 169 (perhaps Form 61B; repeated five times in zone round floor).

116 Palmette in heart; three-leaved, with large volutes below. Style A (iii); mid fifth century?
Example:
FIG. 43p Tunis, Bardo, from Carthage (with Type 304).
Possibly also Rolland, *Saint-Blaise* i fig. 181 top centre (Type 118?).

Palmettes/leaf-sprays

117 Palmette. Three curled leaves on each side. Style A (iii). Used with Types 37, 75.
Examples:
Baradez (1961) pl. III, 14–15; Rolland, *Saint-Blaise* i fig. 177, third down on r.

118 Palmette, composed of three leaves above a double volute. Styles A (iii), C/D, E (i); about mid fifth to early sixth century. Vessel Forms: 75, 98, 99, etc. Used with Types 63, 83; also alone in band, or singly.
Examples:
FIG. 44r PLATE XVI*a* = Form 75.1.
46c Oudna=*BAC*, 1897, pl. IX, 19. *Ibid.* pl. VIII, 12 similar but larger.
Also: Form 98.2, Form 99.6.
Rolland, *Saint-Blaise* i fig. 181 left, top centre (possibly=Type 116); Athens Agora, P 16080.

119 Palmette, composed of seven leaves above a double volute. Style A (iii)?
One example:
Rolland, *Saint-Blaise* i fig. 181 bottom centre (used with rosette in circles?).

120 Stylized leaf-spray, with five leaves, finely dotted. Style D; second and third quarters fifth century. Used with Types 28, 67 variant; also alone. Vessel Forms: 83, 84.
Examples:
PLATE XVI*b*=Form 83.2.
FIG. 44s = Form 84.2.
Also: Rolland, *Saint-Blaise* i fig. 179 top left.
Variant: see Form 96.9 (on rim).

121 Stylized leaf-spray; three leaves and stem with cross-bars, with two circles flanking the stem. Style E (i).
One example:
Antioch iv.i fig. 30.1 (bowl base; single stamp).

Palm-trees

122 Leaf-shaped, with two volutes and a stem below. Style E (ii), early.
One example:
Istanbul, Ayasofya Müzesi 561 (see under Type 234).

123 With double volute springing from stem, and five leaves above. Style E (ii), early. Used with Types 224A, 252?, 253, as subsidiary motif. Vessel Forms: 104A or similar.
Examples:
FIG. 46d Benaki Mus., 12471.
Carthage, Lavigerie 47.38 (see under Type 224A); *Tarsus* i fig. 166, no. 820.

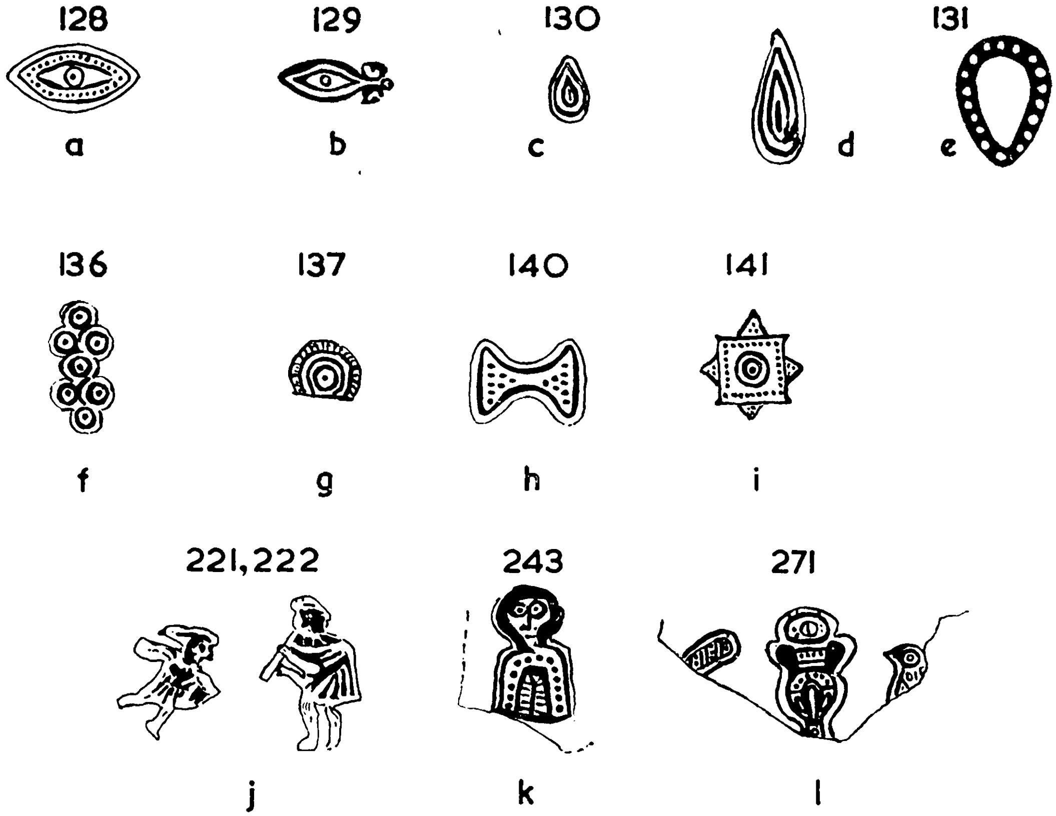


FIG. 45 Style D Scale 1 : 1

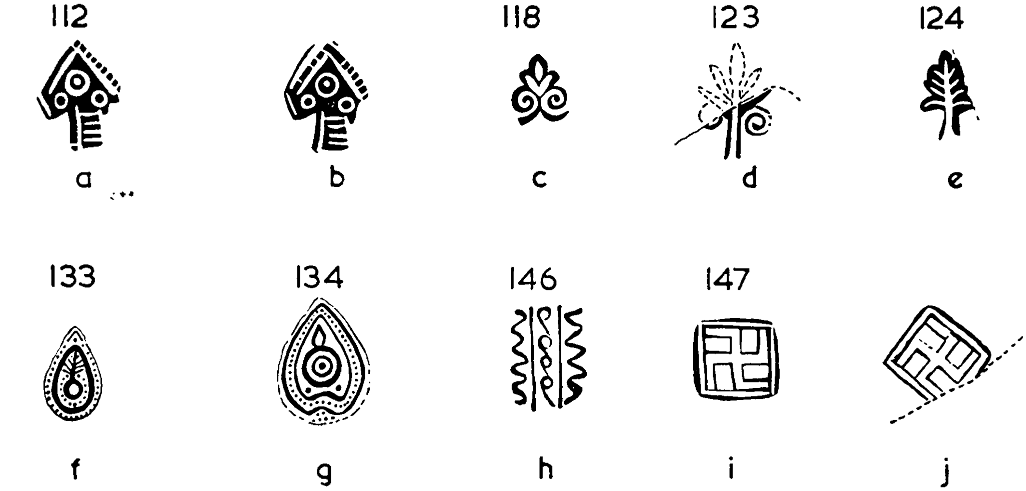


FIG. 46 Style E Scale 2 : 3

Type

124 With branches indicated; no volutes. Style E (ii), early.
One example:
FIG. 46e Mainz RGZM O 34832, from Carthage region (Form 103/104A base; with Types 57, 251).

Flutes

125 Lentoid, with one end rounded; groove round outside following outline. Style D. Used with Types 173, 294, 295B. Vessel-forms: dishes or plates.
Example:
FIG. 44t Benaki Mus., 12439 (with Type 173).
Also: Strzygowski, *Koptische Kunst* 247, fig. 304, from Kom Ishqaw; *Temples of Armant* pl. LXXXII, SSCH 1, pl. LXXXIII, SSAb G7; cf. also *BSA* xliv (1949) 71, no. 3, pl. 22.14.

126 As **125**, with both ends pointed. Style D.
One example:
Form 82.3 (*q.v.*).

127 As **125**, with small fringed circle motif at wider rounded end. Style D, late. Used with Types 300, 301. Vessel Forms: 84, etc.
Example:
FIG. 44u Benaki Mus., 12435.
Also: Bisson de la Roque, *Medamoud 1929* 63, fig. 63, inv. 3439 bis 6.

Lentoid and almond-shaped motifs

128 Lentoid, with dot and circle at centre; double outline, with row of dots between. Style D. Vessel-form: dish/plate (82–84?).
One example:
FIG. 45a Benaki Mus., 12445 (in narrow band, with Type 190).

129 Lentoid, with double outline and dot at centre; two small circles and a knob at one end (cf. Types 101, 103). Style D.
One example:
FIG. 45b = Form 84.4.

130 Almond-shaped, with multiple outline and dot at centre. Style D. Used alone? Vessel-forms uncertain.
Examples:
FIG. 45c Athens Agora, uncat.
d Athens Agora, uncat.

131 Almond-shaped, with double outline enclosing a row of large dots. Style D. Used alone, in band round floor.
One example:
FIG. 45e Form 84.3.

132 Broad almond-shaped stamp, with double outline and row of dots between; fringed dot-and-circle at centre (cf. Type 127). Style E (i); early sixth century?
One example:
Antioch iv.i fig. 29.16 (bowl base; single stamp).

133 Similar, with fringed circle and small palm-motif at centre. Style E (i).
One example:
FIG. 46f Form 99.12.

134 Similar, slightly heart-shaped, with concentric circles flanked by dots at centre. Style E (i). Used alone. Vessel Forms: Form 99 base; unclassified dish.
Example:
FIG. 46g Oudna=*BAC*, 1897, pl. VIII. 16.

Various motifs

135 Circle, with three short lines projecting from each end. Style A (ii)?
One example:
FIG. 43q Cambridge sherd coll. AG 1170, from Athens Agora (dish fr.).

Type

136 Seven small double circles, arranged alternately in pairs and singly. Style D.
One example:
FIG. 45f Mainz RGZM O 17553, from Egypt (with Type 100).

137 Fringed circles, with one side truncated. Style D.
One example:
FIG. 45g Athens Agora, uncat. (dish fr.).

138 Two double lines, forming a cross, with four pairs of volutes between. Style E (i).
One example:
Clerc and d'Agnel (1904) 82, pl. VIII. 2 (from large dish; with Type 165).

139 Square motif, formed of four double volutes linked by small 'bud' motifs at corners; small circle at centre. Style uncertain, perhaps A (iii). Related to both the double-volute and palmette motifs (see above). Used alone, in band round floor.
One example:
Baradez (1961) pl. IV, 4.

140 Astragal-shaped motif, dotted. Style D. Used alone, repeated in band.
One example:
FIG. 45h = Form 84.1.

141 Dotted square, with dotted triangles projecting from sides; circles at centre. Style D.
One example:
FIG. 45i Athens Agora, P 12048 (dish fr.; with Type 98).

142 Concave-sided heptagon, with double outline enclosing row of dots; seven dot-and-circle motifs surrounding a central dot-and-circle. Style E (i).
One example:
Antioch iv.i fig. 29.17 (bowl base; single stamp).

143 Semicircular motif with dotted outline; fringed circle at centre, short stem below. Style E (i).
One example:
Oudna; Gauckler, *BAC,* 1897, pl. VIII, 10.

144 Arch-shaped motif, with radial lines and dots. Style E (i)?
One example:
Oudna; *ibid.* pl. VIII, 17.

145 Triangular with dotted outline; circles in centre. Style E (i)?
One example:
Oudna; *ibid.* pl. IX, 16.

146 Row of linked circles between two lines, flanked by two wavy lines. Style E (i).
One example:
FIG. 46h = Form 99.7.

147 *Swastika in square.* Style E (i). Used singly. Vessel-forms: 97, 99.
Examples:
FIG. 46i Gauckler, *BAC,* 1897, pl. VIII, 6 (from Oudna).
j = Form 97.4.
Also: *Cat. Musée Lavigerie* iii 52, pl. XI, no. 15.

148 *'Planta pedis',* with crude outline and dotted centre. Style A (ii), late.
One example:
FIG. 43r British Museum 88.6–1.689, from Naucratis region, Egypt (Form 67 base; with Type 4).

149 Similar, in simple outline. Style A (ii)–(iii).
One example:
Antioch iv.i fig. 29.13 (with Types 73(?), 108).

150 Fan-like motif, with series of radiating lines (as Type 73) surmounting a double volute (linked at top). Style E (i).
One example:
Delattre (1888) 220, no. 5, fig. 1 (=Leclercq (1907) 532, fig. 352; *DACL* xiv 1178, fig. 10338). Dish base, perhaps Form 103; used with variant of Type 200.

* * *

Hares

Type

151 Small, with curly tail; running (l.). In simple outline, with eye shown. Style E (i). Used alone. Vessel-forms: bowls.
Examples:
FIG. 48f Oudna; Gauckler, *BAC*, 1897, pl. IX, 2–3 (pl. VIII, 18 is a variant).
Also: *Antioch* iv.i fig. 30.3; Popescu (1965) fig. 4, 1.
Variant, with long ears (Style D):
FIG. 47a Mainz RGZM, under O 17545, from Egypt (Form 83 or 84; with Type 105).

152 Similar, to r., with both forelegs indicated. Style D.
One example:
Gallia xviii. 2 (1960) 300, fig. 20 (with Type 83).

153 As **151**, with ribs and both forelegs indicated. Rather larger. Style A (iii) or E (i). Used alone, in continuous band.
One example:
Antioch iv.i fig. 29.1 (dish).

154 Medium-sized, running l.; more detailed. Style E (ii), early.
One example:
Form 103.9 (*q.v.*).

155 With crude outline in relief. Style A (iii)?
One example:
FIG. 48a Athens Agora, P 382.

Lions

156 Lion(?) l., with linear decoration as on **153**. Style perhaps A (iii).
One example only (head missing):
Antioch iv.i fig. 29.2.

157 Lion r., with elaborate linear details. Style A (iii).
One example:
FIG. 48b Athens Agora P 16080 (dish fr.; with a palmette motif?).

158 Similar, walking r. with head lowered. Style A (iii).
One example:
FIG. 48c Louvre MNB 3195–9 (in band round floor).

159 Lion l., larger. Style E (ii).
One example:
Form 104.26 (*q.v.*).

Stag

160 Small, to r., in outline. Style A (iii).
One fragmentary specimen only:
FIG. 48d Louvre, uncat. (in band round floor(?), with crude palm-motif).

Bull/cow

161 Large, to l., with garland(?) across shoulder. Style E (ii). Used alone, at centre of floor.
Two fragmentary examples:
FIG. 48l Tunis, Bardo, from Carthage (Form 104 base).
Similar: Posac Mon (1964) 326, fig. 2, no. 1 (large dish base).

162 Fairly large, to r., in rapid motion; linear details. Style E (ii).
One damaged specimen:
FIG. 48m = Form 93.17 (*q.v.*).

Bear(?)

163 Large and crude, to l. Style E.
One example only, with foreparts missing:
FIG. 48n Apollonia, Cyrenaica (at centre of bowl as Form 93?).
Related(?): *Nessana* i pl. LIX B5 (hindparts only).

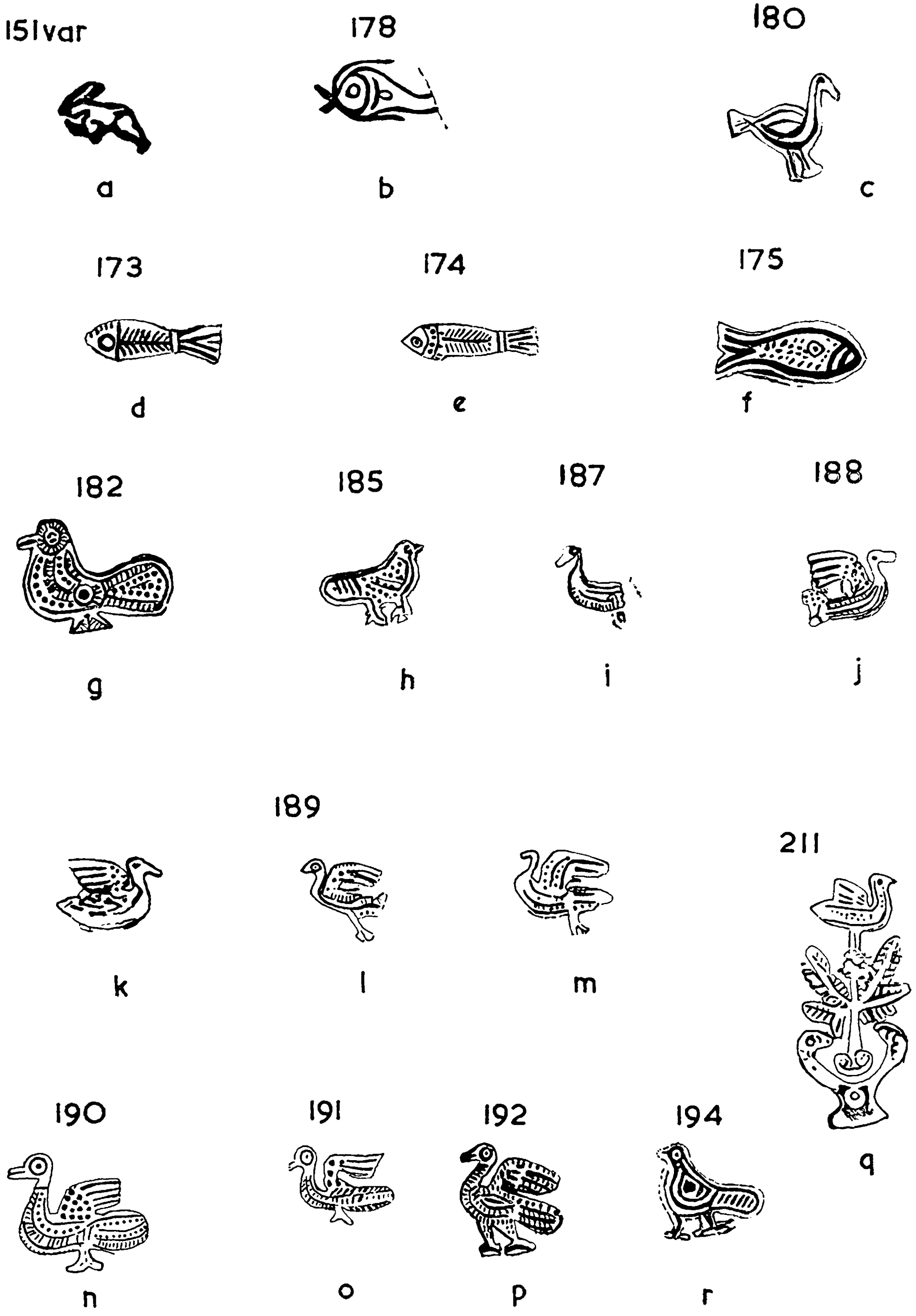


FIG. 47 Style D Scale 1 : 1

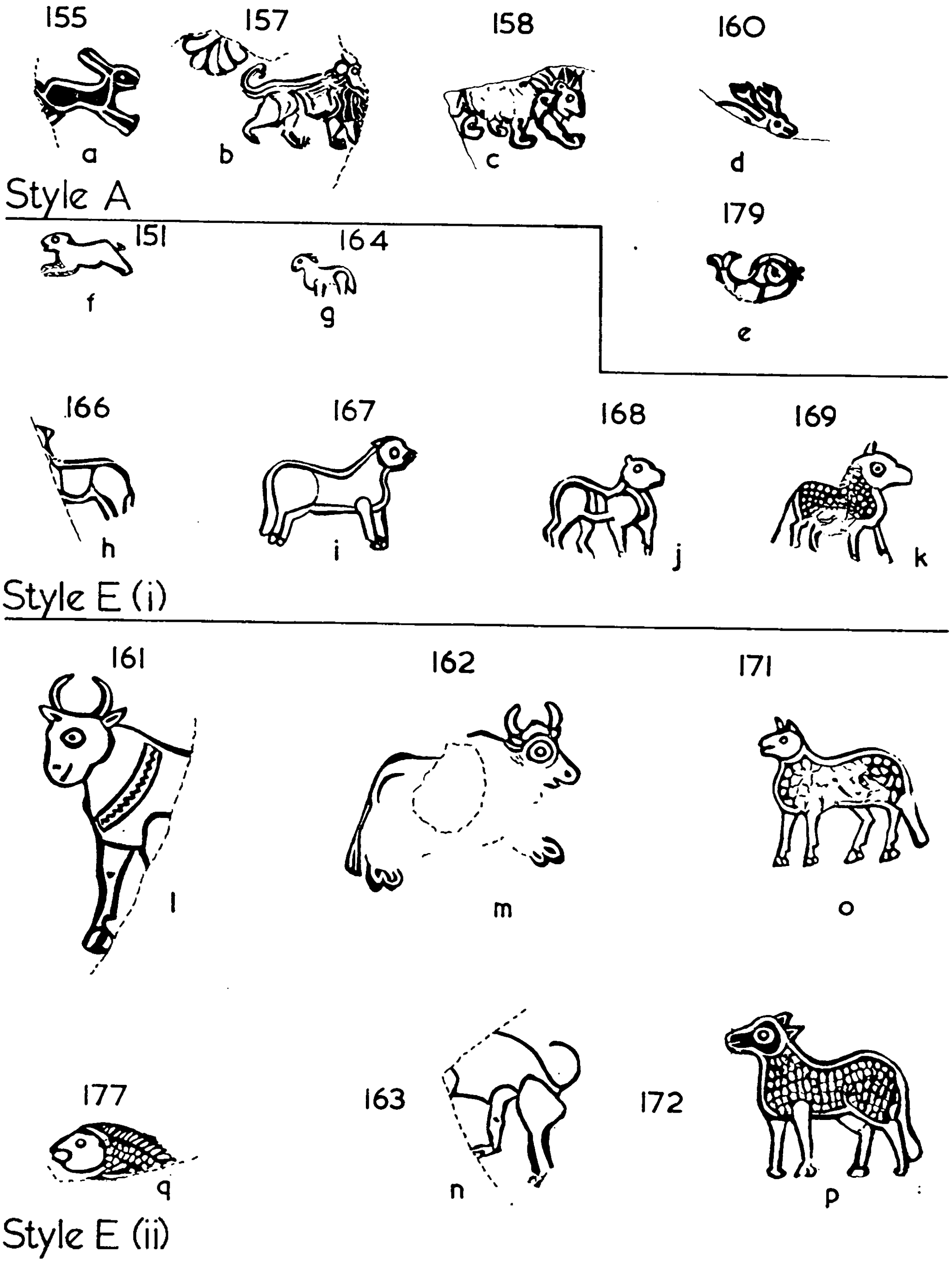


FIG. 48 Scale 2 : 3

Lambs

Type

164 Very small, to l., in simple outline. Probably a lamb. Style E (i). Vessel-form: base as Form 99.
Example:
FIG. 48g Oudna; Gauckler, *BAC*, 1897, pl. IX, 5.

165 In outline, with shoulder-joints indicated; stiff pose, to r. Style E (i).
One example:
Clerc and d'Agnel (1904) 82, pl. VIII, 2 (with Type 138).

166 With double outline to body, and leg-joints shown; to l. Style E (i). Vessel-forms: base as Forms 96–97.
Example:
FIG. 48h Oudna. Gauckler, *BAC*, 1897, pl. IX, 1 is a duplicate.

167 With double outline to body; long tail; all legs indicated. Medium size; to r. Style E (i).
One example:
FIG. 48i Carthage, Lavigerie (at centre of bowl Form 93?).

168 Similar, more compact, with all legs indicated separately; linear body-details. Style E (i).
One example:
FIG. 48j Univ. of Michigan 20983, from Karanis (Form 99A base).

169 Similar, with large head; body covered with dots (to indicate fleece). Style E (i)/(ii), perhaps second quarter of sixth century.
Two examples:
FIG. 48k Univ. of Michigan 20978, from Karanis (Form 99?).
Posac Mon (1964) 326, fig. 2, no. 3, pl. I bottom r. (Form 99 A/B).

170 Small, to r., with dots on body. Style E. Cf. the lamb-motifs on jewelled crosses of Type 329.
One example:
De Waal (1904) 312, no. 8, pl. II, 2 (in Rome; bowl base).

171 Medium to large, with double outline and all four legs shown; heavy tail; body covered with dots; ears on top of head. To l. and r. Style E (ii); about second quarter of sixth century. Used as subsidiary to cross-motifs, also alone. Vessel-forms: 103, 104A, also bowls.
Examples:
FIG. 48o = Form 103.6.
Baradez (1967) 235, 240, 242, figs. on pp. 236, 241, nos. 3, 9, 10.

172 Large, with features in relief and dotted fleece; a cruder version of **171**. Ears behind head. Mainly to l.; variant to r. Style E (ii); about second quarter of sixth century. Used flanking crosses (Types 321 variant, 331A, etc.); also alone. Vessel-forms: 103A, 104A, also bowls.
Example:
FIG. 48p = Form 103.3, *q.v.*
Also: Apollonia, Cyrenaica (from French excavations); Baradez (1967) fig. on p. 247, no. 19; *ibid.* fig. on p. 239, no. 6 (to r.).
Variant (to r., rather finer): Form 104.10.

Fish

173 Small and stylized, with backbone shown. Style D. Used with Types 125, 189A. Vessel-forms: 82 and similar.
Examples:
FIG. 47d = Form 82.5.
Benaki Mus., 12439.

174 Same, elaborated, with dotted band across head. Style D.
One example:
FIG. 47e Benaki Mus., 12443 (dish as Forms 82–84; in band round floor, repeated).

175 Dotted, with outline in relief; 'eye' in centre of body. Style D.
One example:
FIG. 47f Benaki Mus., 12461 (with Type 290).

Type

176 Larger and more naturalistic, with scales indicated; forked tail. Style E (ii), early. Subsidiary motif.
One example: Form 104.1 (*q.v.*).

177 Similar, with spines on back. Style E (ii). Used flanking main motif.
One example (tail missing):
FIG. 48q Tunis, Bardo, from Carthage=*Cat. Alaoui*, 1910, no. 912 (with Type 239C).

Dolphins

178 Dolphin l., in simple linear style. Style D.
One example:
FIG. 47b Philadelphia, Univ. of Pennsylvania 49-32-172, from Athens Agora (with Type 87).

179 Dolphin r., with a little linear detail. Style A (iii).
One example:
FIG. 48e Louvre MNB 3195-15 (used alone, in band).

Various birds

180 Highly stylized bird, consisting of linear pattern; to r. Style B; early fifth century?
One example:
FIG. 47c Athens Agora, P 8047 (with Type 9).

181 Small bird l.; only a little linear decoration indicated. Style D. Used alone, in narrow band.
One example: Form 82.6 (*q.v.*).

182 Peacock(?) perching l.; elaborate ornament of lines and dots. Style D, perhaps late. Repeated in narrow band.
Example:
FIG. 47g Athens Agora, P 6741.
Cf. Delattre (1893) 39, no. 61, with fig. in text (used with elaborate cross-motif as Types 300–302).

183 Similar, less elaborate, with linear decoration; concentric circles on tail. Style D. Repeated in narrow band.
One example:
Temples of Armant pl. LXXXII, SSAB 1.
Related: *ibid.* pl. LXXXII, SSAB 2.

184 Slender peacock l., with linear and dotted decoration, and fan-tail. Style E (i).
One example:
Oudna; Gauckler, *BAC*, 1897, pl. IX, 7.

185 Partridge r.; elaborate ornament of lines and dots. Style D. Stamp repeated in narrow band.
One example:
FIG. 47h British Museum 94.9-24.28, from Coptos; Dalton (1901) 163, no. 927 (fr. Form 82–84; with Types 294, 295A).

186 Partridge r.; linear details. Style E (i). Used singly.
One example:
Oudna; Gauckler, *BAC*, 1897, pl. IX, 14.

187 Duck(?) l., apparently swimming; fine linear and dotted ornament. Style D. Stamp repeated in band round floor.
One example:
FIG. 47i Mainz RGZM, under O 17549, from Egypt (Form 82?).

188 Duck(?) r., either flying or swimming; lines and dots on wing and body. Style D. Repeated in band round floor.
Examples:
FIG. 47j Benaki Mus., 12448 (Form 82; edge of a motif preserved at centre).
k British Museum 94.9-24.29, from Egypt(?); Dalton (1901) 162, no. 925.

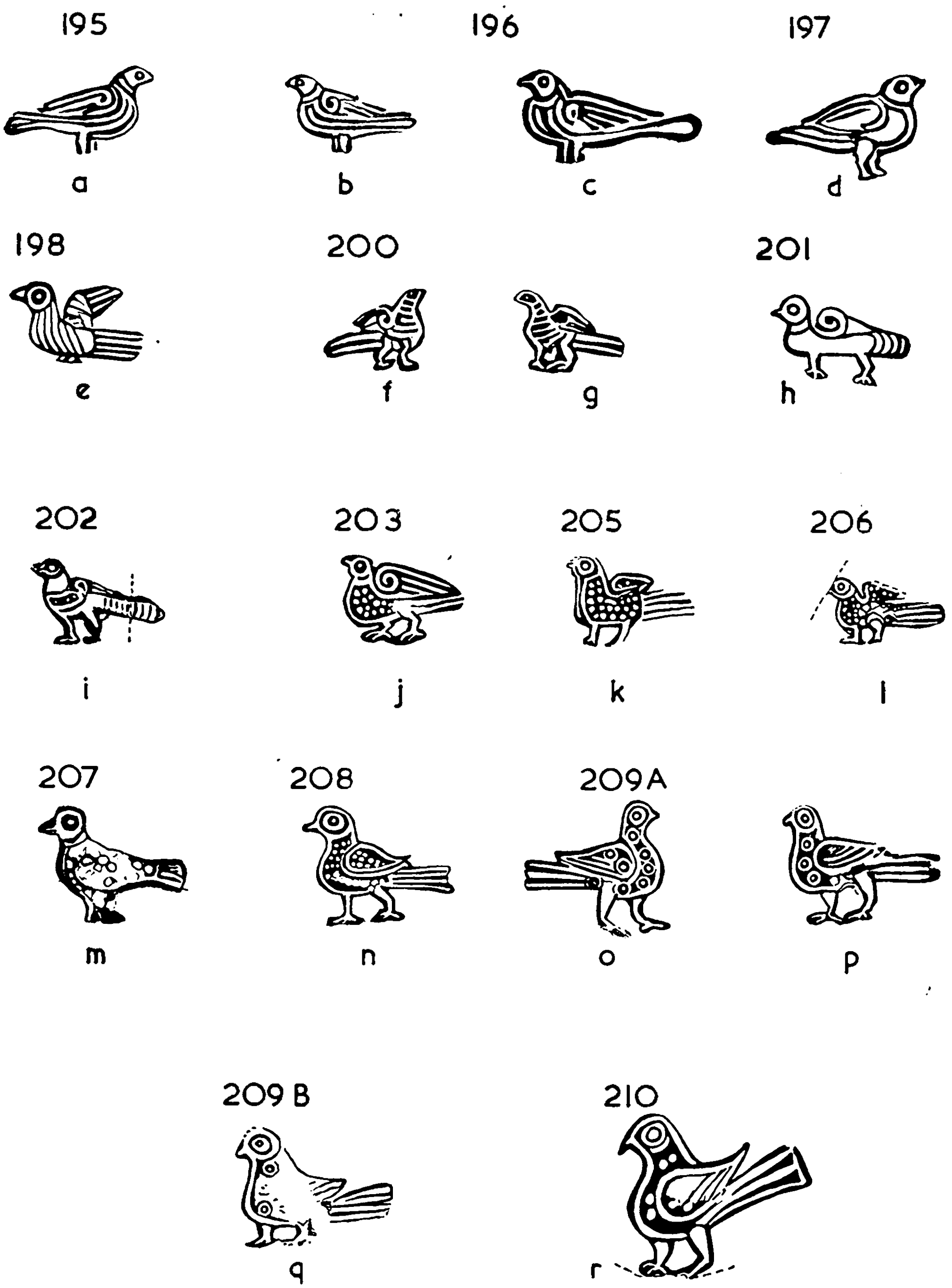


FIG. 49 Style E Scale 2 : 3

Type

189 Bird flying l., with wing raised and leg trailing; ornament of fine lines and dots. Style D.
Two varieties:
A with thin wing and body; circular eye.
B heavier wing, deeper breast; eye not indicated.
Repeated in band round floor. Vessel-forms: 82 and similar.
Examples:
Variety A FIG. 47l = Form 82.5 (*q.v.*).
Variety B m Mainz RGZM, under O 17552.
Corinth C-28-42.

190 Bird perching or flying l., with wing raised; elaborate ornament of fine lines and dots. Style D, perhaps early.
One example:
FIG. 47n Benaki Mus. 12445 (Form 82-84 dish; in narrow band, with Type 128).

191 Similar, simplified. Style D, probably late. Repeated in narrow band.
One example:
FIG. 47o Benaki Mus., 12450 (Form 82B; rouletting round stamped band).

192 Long-necked bird l. with wing raised; both legs indicated; elaborate linear and dotted ornament. Style D. Repeated in narrow band.
One example:
FIG. 47p Athens Agora, P 7813.

193 Long-legged bird l.; simple linear decoration. Style A (iii)/E (i).
One example:
Zeiss (1933) 467-8, fig. 1.3 (large dish; with Type 307).

Doves

194 Small, with fine linear details; shown strutting l. Style D, late.
One example:
FIG. 47r Pavia, Italy (Prof. A. Stenico), from Egypt. Form 84; stamp repeated four times at centre, with a band of rouletting around (cf. Form 84.7).[1]

195 Fairly small, with inner details rendered by lines; small head, slight curl at wing-base, legs together; to l. and r. Style E (i); early sixth century. Used as subsidiary motif to crosses of Types 303, 311, 322 (especially Type 303). Vessel Forms: 103, 104A.
Examples:
FIG. 49a, b Louvre, uncat. (with Type 303, *q.v.*).
Also: Form 104.7-8 (birds l. and r.).
Delattre (1888) 220, nos. 26, 28, figs. 5, 6=*Cat. Musée Lavigerie* iii 50, pl. XI, nos. 2, 4; *Bull. soc. antiq. France,* 1945-47, 246, pl. II, fig 1a; Louvre MNB 3195-2, 6, 18; further frs. from Carthage in Tunis, Bardo, and Mus. Lavigerie.

196 Similar (to l.), rather larger, with larger head (beak defined, simpler tail and reverse curl at wing-base. Style E (i). Used alone, repeated.
One example:
FIG. 49c = Form 103.1 (*q.v.*).

197 Similar (to r.), with simpler linear details; more prominent legs. Style E (i). Vessel Form: 104A.
FIG. 49d Louvre MNB 3190 (see under Type 322).
Duplicate: Baradez (1967) fig. on p. 239, no. 7. Perhaps also Baradez (1961) pl. IV, 13 (fragmentary, on Form 103 base).

198 With wing raised; linear decoration (hatching on body, lines on wing and tail); to l. Style E (i). Used singly, on bowl (Form 96, 97 or 99).
One example:
FIG. 49e Oudna=Gauckler, *BAC,* 1897, pl. IX, 17.
Cf. also *ibid.* pl. IX, 13.

[1] Rubbing and photo kindly supplied by Prof. Stenico, who has allowed me to cite his piece here.

Type

199 Similar, strutting l.; both legs shown. Style E (i).
One example:
Ibid. pl. VIII, 11 (from Oudna).

200 Rather small, with small wing and head; legs apart; schematic linear decoration with bars across neck, curl at wing-base; to l. and r. Style E (ii), early. Form 104A base; flanking cross of Type 330.
One example:
FIG. 49f, g Vienna, Kunsthistorisches Museum, uncat.
Related type, with more prominent tail and wing (cf. some of the types above). Style E (i). Delattre (1888) 220, no. 5, fig. 1, from Carthage (see under Type 150).

201 Small and elongated, with legs wide apart; large curl on back represents wing; body in outline, bars across tail; to l. and r. Style E (ii), early. Used as **200**, on dishes.
Example:
FIG. 49h Tunis, Bardo, from Carthage (with cross of Type 330).
Similar to r.; *Missione archeologica italiana a Malta, 1963*, pl. 16.2 (from Tas-Silg).

202 Similar to l., with shorter body, long barred tail; dotted band across shoulder linking with wing-curl. Style E (ii); about second quarter of sixth century. Used singly, on Form 99.
Examples:
FIG. 49i = Form 99.13. Tail missing; restored after Athens Agora P 19640 (identical stamp).
Also: Form 99.17.

203 With dots on breast, lines on wing and tail; large wing-curl; legs apart; to l. Style E (i)/(ii). Used alone. Vessel-forms: dishes.
Example:
FIG. 49j Oudna=Gauckler, *BAC*, 1897, pl. IX, 6 (dish base, unclassified).
Also: *DACL* xiv 1178, fig. 10338, from Carthage.

204 Similar with short wing, raised; dots on body, lines on wings and tail. Style E (ii)?
One example:
Baradez (1967) 245–6, fig. on p. 247, no. 20 (bowl base; single stamp).

205 Similar, with small wing, body dotted; to l. Style E (ii), early.
One example:
FIG. 49k = Form 103.10 (*q.v.*).

206 Similar, with small wing bearing dots, raised above body. Style E (i)? Used singly.
One example:
FIG. 49l Louvre, uncat. (on bowl base).

207 With dotted decoration on body, and short tail; wing not clearly indicated. Style E (ii). Used singly.
One example:
FIG. 49m = Form 99.18.
Related: Gauckler, *BAC*, 1897, pl. IX, 9 (from Oudna; to r.).

208 With folded wing and legs apart; large dots on body and wing. Style E (ii). Used on subsidiary motif to Types 231, 239A, 326, 330, 335? Vessel-forms: 103? 104.
Example:
FIG. 49n Tunis, Bardo, from Carthage (Form 103(A?); with Type 330).
Also: Form 104.5 and 6(?).
De Waal (1904) 310–311, pl. II, 1=*DACL* xiv 1185, fig. 10350; *Cat. Musée Lavigerie* iii 50, pl. XI, no. 1; perhaps also Form 104.11 (*q.v.*).

209 Similar, with dot-and-circle motifs on breast and wing-base, lines on wings (l. and r.). Style E (ii).
Two main versions:
A with long legs. Second quarter to mid sixth century.
B with short legs; rather cruder. Later: second half of sixth century.
Used as subsidiary motif to Types 228, 230C, 231, 262, 331A–B. Vessel Forms: 104A–B–C.

Type

Examples:

A FIG. 49o PLATE XVII*a*=Form 104.3 (to r.).

p Benaki Mus., 12469 (to l.).

Probably also: *Cat. Musée Lavigerie* iii 50, pl. XI, no. 3; Delougaz, *Khirbat al-Karak* pl. 31.9=pl. 61.4.

B FIG. 49q Athens Agora P 7613.

Also: Form 104.25(?); Athens Agora P 12093; *Ampurias* v (1943) 75, pl. XVIII, fig. 40 centre r.

Probably also: *Antioch* iv.i fig. 30.11 and fig. 31 top; *Nessana* i pl. LIX A3.

210 Similar, large, with outline in relief, and decoration of thick lines and large dots; to l. only. Style E (ii). Used with Types 331B, 333.

Example:

FIG. 49r Benaki Mus., 12472 (Form 103B? base).

Also: Form 103.8, Form 104.21.

Other birds

211 Bird on tree. Small bird r., similar to Types 188/190, perching on a small five-branched tree or bush, set on an ornamental stand. Style D.

One example:

FIG. 47q Benaki Mus., 12466 (dish fr. as Forms 82–84; used flanking centre, probably one of a pair, surrounded by an outer band of Type 106).

212 Cock. Small, to r., with linear details. Style E (i). Used singly. Vessel Form: 96.

Examples:

Form 96.3 (from Oudna). Gauckler, *BAC*, 1897, pl. IX, 10 is similar.

213 Cock. Large, to r.; rendering similar to that of Types 171–2 and 208–10, with double outline to body and wing. Style E (ii)?

One fragmentary example:

Posac Mon (1964) 326, fig. 2, no. 4=pl. I centre left. Single central stamp surrounded by two grooves (perhaps Form 93).

(Types 214–220 vacant)

* * *

Human figures, various

221 and 222 Piper l., and dancer r., both very small. The two figures form a group; the piper, on the r., has a short cloak or the like; the dancing figure (on l.) appears to float in mid-air, with drapery flying (possibly a Cupid?). Details indistinct. Style D. Used in band round floor, the two figures alternating. Vessel-form: dish (as 82–84).

One example:

FIG. 45j Benaki Mus., 12449.

223 Bacchus with panther and amphora. Frontal pose, naked, with a cloak thrown over his l. shoulder, and slightly twisted body; grape-clusters and vine-shoots in l. arm; r. arm bent, holding a small amphora tipped over horizontally; below the amphora a small dog-like animal (presumably to be interpreted as a panther) to l., with head twisted up in order to drink from it. Style E (ii). Several versions of the Type occur, showing a progressive degeneration. The earliest (A) is rather small, with fine details; unfortunately no complete example can be cited. The arrangement of the cloak and vine-spray differs from that of the later versions; the 'panther' is fairly well rendered, with a dot and circle for the eye; the amphora appears to be small and slender. A second version (B) is larger, but equally detailed; a wreath is visible on the head, and two palmette-like leaves and a globular bunch of grapes emerge from the cloak; the panther is probably cruder. The third version (C) is similar in size to B, but rather less detailed; in style it corresponds to the general run of stamps of around the middle of the sixth century. The wreath is now replaced by rows of globules indicating the hair; two leaves and a pointed bunch of grapes appear on the r., the lower leaf drooping over a disk-like motif in the drapery. The amphora is broad-bellied, the panther below crudely

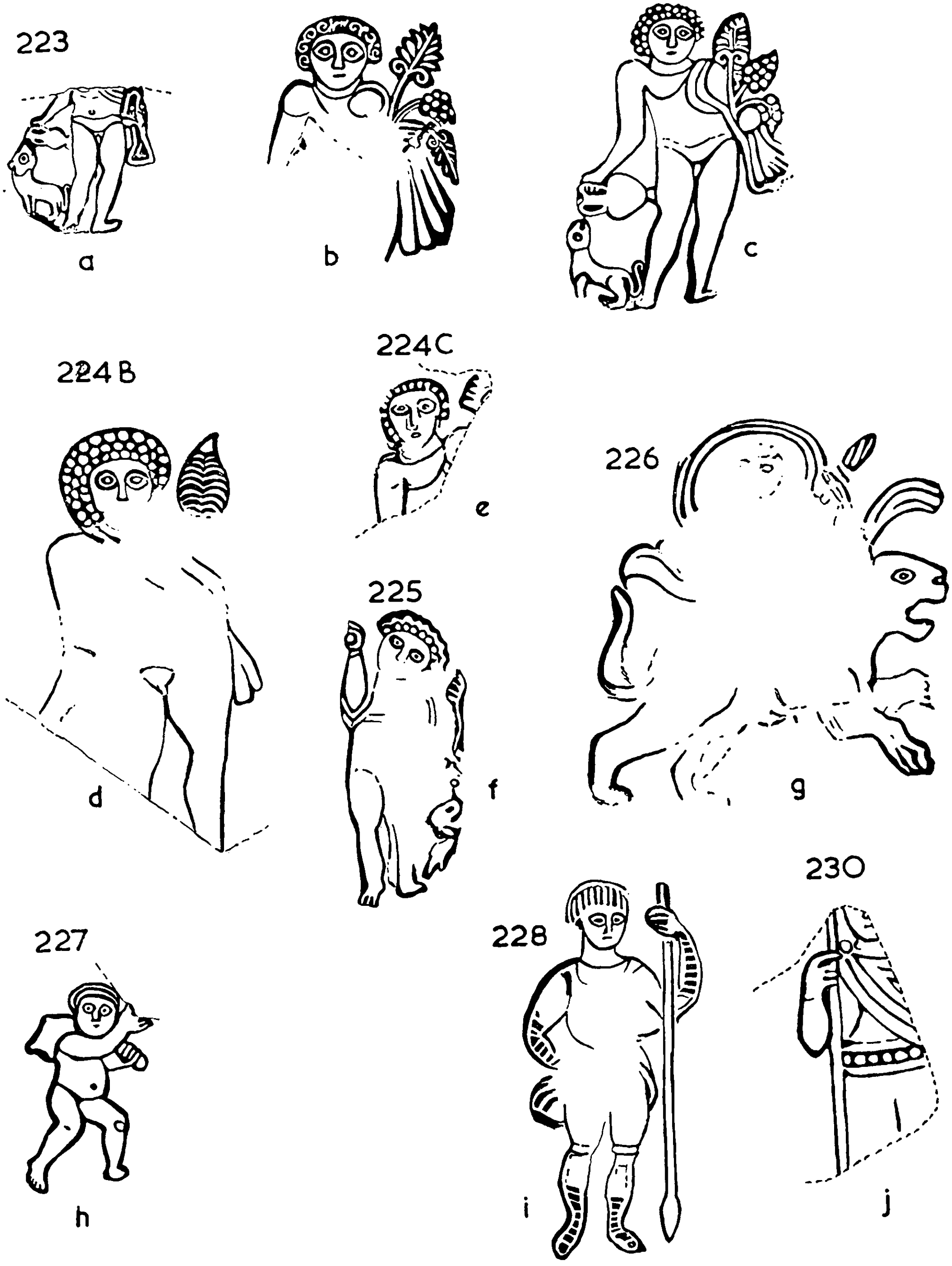


FIG. 50 Style E Scale 2 : 3

Type

rendered, with a circle for the eye. For later versions, see Type 224. Used singly or in pairs, without subsidiary motifs. Vessel Forms: 93(?), 103A, 104A–B–C.

Examples:

A FIG. 50a Tunis, Bardo, from Carthage(?); apparently=*Cat. Alaoui* (1910) 318, no. 745. Single stamp, surrounded by groove to form a sort of emblema.

B FIG. 50b Abu Mena 66.1401 (Form 104 A/B base; originally two stamps, side by side). Similar: *Antioch* iv.i figs. 30.12, 32.3 (Form 93?, perhaps frs. of same vessel).

C FIG. 50c Tunis, Bardo, from Carthage; *Cat. Alaoui* (1910) 318, no. 744 (Form 104B base; two stamps).
Similar: Form 104.23 (*q.v.*).

224 Bacchus motif; as **223**, but cruder rendering. Style E (ii). At least two different renderings. Version A similar to Type 223C, heavily retouched; anatomy marked by heavy lines; upper vine-leaf simplified, with large volutes; tail of panther modified; cloak falls to knee-level. On a second version (B) the hair is rendered by three lines of large globules, and the upper leaf in the vine-motif is also enlarged; the rest of the scheme is not clear. A possible third version of the type has the hair reduced to a single line of globules; the identification is, however, not certain. These stamps appear singly, flanked by the other motifs (Types 123, 252, 253). Vessel Forms: 104A–B?

Examples:

A Carthage, Lavigerie, 47.38; Delattre (1893) 39–40, no. 62, with fig. in text=Salomonson (1962) 71, pl. XXII, 5.
Similar: *Nessana* i pl. LIX A 6.

B FIG. 50d Apollonia, Cyrenaica, Byzantine Palace (Form 104A base, with Type 252).

Also (C?): FIG. 50e Athens Agora, P 3162.

225 Medium-sized standing figure, perhaps Bacchus; frontal, with r. hand raised in salute, floral pattern(?) on other side; possibly naked. Style E (i)/(ii); early sixth century(?) Cf. Type 232. Used alone.

Examples:

FIG. 50f= Form 93.10 (Univ. of Michigan 7159).
Similar: Apollonia, Cyrenaica (French excavations).

226 Bacchus on panther(?). Large feline running r.; hand holding a thyrsus(?) and swirls of drapery visible above. Style E (ii). Identification not certain; one example only, poorly preserved:

FIG. 50g = Form 104.17 (*q.v.*).

227 Cupid walking r., with r. arm raised and wineskin(?) over shoulder. Style E (ii). Used as a subsidiary motif, with Type 236 variant and crosses; also alone. Vessel Forms: 93B(?) 104A, C.

Example:

FIG. 50h = Form 93.24 (*q.v.*).
PLATE XIX*a* Mainz, RGZM, O 9087.

Also: *Cat. Musée Lavigerie* iii 51, pl. XI, no. 9 and no. 18 (Delattre (1893) 40, no. 64; variant with palm-branch above head); Saller, *Excavations at Bethany* (*1949–53*) 260–1, fig. 49, no. 2661; *Samaria-Sebaste* iii 361, fig. 84, no. 24; Athens Agora, P 7325.

228 Soldier with downturned spear in l. hand, wearing *bracae* and short cloak. Style E (ii), early; about second quarter of sixth century. Found singly or in pairs; may represent the Dioscuri or warrior-saints. With Types 58, 209.

Examples:

FIG. 50i PLATE XVII*a*=Form 104.3.
PLATE XVII*b*=Form 104.4.

Also: *Mat. şi cerc. arh.* vii 678, fig. 5.

229 Debased version of **228**. Standing figure with l. arm bent, holding spear or staff; r. hand on hip; virtually no body-detail. Style E (ii), late(?).

One example:

Marseille; Benoît, *Bull. soc. antiq. France* 1945–47, 246–251, pl. II, fig. 1c= Salomonson (1962) 71, pl. XXII, 4 (dish, perhaps Form 104B; flanking large cross).

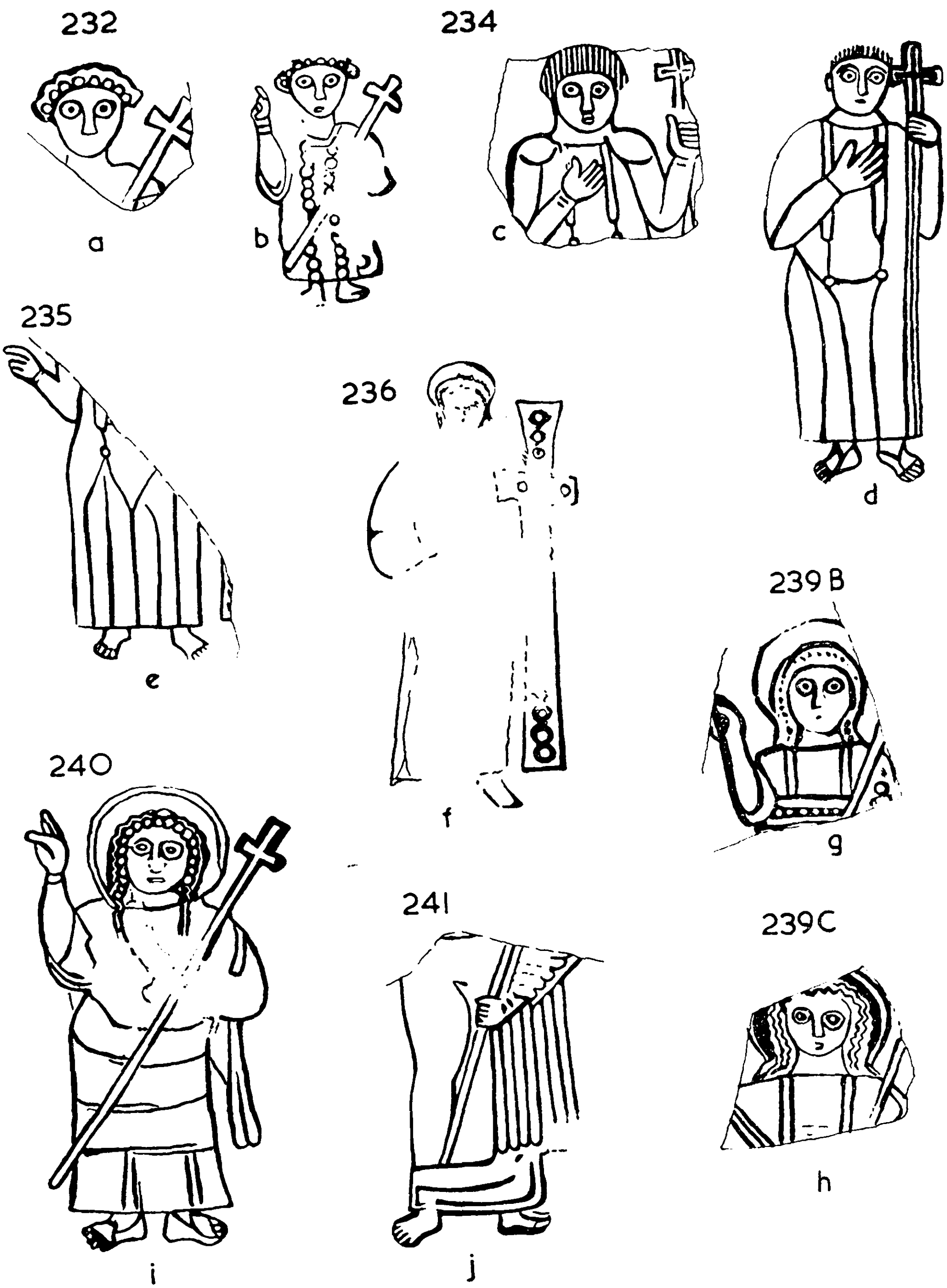


FIG. 51 Style E Scale 2 : 3

Type

230 Emperor, frontal; large figure, wearing tunic with decorated belt, holding sceptre in r. hand, orb in l. hand; cloak over shoulder. Style E (ii); third quarter of sixth century or later. A number of versions, showing some degeneration of the type. The best (A) has well-defined features, on a par with such stamps as Type 223B–C; the r. hand is placed low (just at shoulder level), and the left hand with the orb a little away from the body. Two more versions (B–C), rather poorly stamped, with indistinct features, may be distinguished; in both the figure seems to wear a flat cap on the head; the r. hand grasps the sceptre at head-level, and the orb is held in front of the body. In B the sceptre is held close to the body, and the cloak appears to fall down to level with the l. knee; in C the sceptre is further away from the body, and the drapery bulges out at waist-level. A possible further version appears on the Beit Alfa piece (see below). The stamp is generally used centrally, flanked by other motifs (as Type 229); found with Types 18, 210, 246B, 260, 261, 277. Vessel Forms: 104A, C.

Examples:

A FIG. 50j Athens Agora, P 1861.
Similar: Bucarest, Mus. Nat. V. 7698, from Istros (S. Lambrino, 'Empereur pré-byzantin figuré sur une coupe en terre cuite', *Revista Istorică Română* i (1931) 63–74; R. Florescu, 'Un tip ceramic necunoscut din veacul al VI-lea', *Studii şi cercetări de istoria artei* ii (1955) 338–42; Popescu (1965) 701–3, fig. 3.3; Baradez (1967) 262–4, fig. on p. 263, 1 (*sic*)—Form 104A or B base; with Type 246B, surrounded by two separated grooves).
Also: *Antioch* iv.i fig. 32.4.

B PLATE XVIII*a* British Museum 88.10–8.4 (Form 104A base).
Similar: Univ. of Michigan 20979, from Karanis (Form 104A base).

C Form 104.25 (*q.v.*). Duplicate: *Nessana* i pl. LIX A 3. Also *Bull. Israel Expl. Soc.* xviii (1954) 222, pl. X fig. 5.

D? Bagatti (1953) 71, pl. XVII a, from Beit Alfa (single stamp, surrounded by three grooves; cf. Form 104C). Different pose from the above.

231 Standing figure, frontal, with hands raised in *orans* position; wearing short belted tunic(?), short cloak and Phrygian cap; large, H. *c.* 12. Style E (ii); about second quarter of sixth century. Used centrally, with subsidiary motifs Types 208, 210(?), 326, 331A.
Examples: Form 104.5–6 (*q.v.*).

For a further type of figure, probably secular in character, see Delattre (1888) 221, no. 38, fig. 8 (apparently on Form 104; flanked by two crosses and doves—unclassified). Legs crossed, r. arm raised, drapery(?) falling from each arm—possibly a dancer.

Saints

232 Medium-sized, wearing a beaded *dalmatica*, with r. hand raised in salute (cf. Type 225), and cross on staff held diagonally across body in l. hand. Style E (i); early sixth century. A larger and a smaller size. Used singly. Vessel Forms: 93A and large dish.

Examples:

FIG. 51a Leiden F 1955 4/18, from Oxyrhyncus (large size; from a large dish or the like).

FIG. 51b = Form 93.12 (Univ. of Michigan 20024; small size). Duplicates: Apollonia, Cyrenaica, Byzantine Palace (Form 93 base); Marzameni (Sicily), from wreck = *Archaeology* xxii.2 (April 1969) 125, with fig. in text.

233 Large (H. *c.* 10·5), wearing *dalmatica* with two plain strips; hair rendered by globules; r. arm bent across chest; cross on staff held vertically in l. hand, away from body; sandals on feet. Style E (ii), about second quarter of sixth century. Flanking motifs: Types 55, 176.
One example: Form 104.1.

234 Large, wearing *dalmatica* with strips and 'buttons'; hair a series of straight lines; r. arm bent across chest; cross on staff in l. hand, held close against body; sandals on feet. Style E (ii), around second quarter of sixth century. Used singly or in pairs, with flanking motifs Types 122, 205, 246C. Vessel Forms: 103B, 104.

Type

Examples:

FIG. 51 d = Form 103.10 (*q.v.*).

Istanbul, Ayasofya Müzesi 561, from neighbourhood of Örengeri (Cilicia); L. Eisbach, *Ayasofya Müzesi Yıllığı* vi (1965) 98–99, fig. 1 (Form 104 base; flanking cross of Type 323).

Also: Athens Agora, P 197; Apollonia, Cyrenaica, Byzantine Palace.

Variant, rather more detailed:

FIG. 51 c Benaki Mus. 12468.

235 Similar, with r. arm bent outwards; cross jewelled. Style E (ii), early.

Examples:

FIG. 51 e Benaki Mus. 12465 (Form 104A base; with Type 245).

Form 103.9, *q.v.* (complete stamp).

236 Similar to **234**, with more elaborate jewelled cross, held close against body; r. hand on chest, large, with fingers held as in benediction (cf. Type 232); several drapery folds over legs. Style E (ii).

Example:

Héron de Villefosse, *Musée africain du Louvre* (1906/1921) 7, no. 69, pl. XIX, 5 (Form 104? base; single stamp).

Perhaps same type: Form 103.5 (*q.v.*).

Related: FIG. 51 f PLATE XIX*a*. Mainz, RGZM O 9087, from Egypt (Form 104A base; with Type 227).

237 Similar, very crude; body rectangular, with cross on staff attached to side. Style E (ii).

Example: Form 104.12 (*q.v.*).

238 Similar, with cross on l., held in r. hand, and l. arm bent across chest; a snake below feet. Presumably belongs to this ware; the rendering of the figure and the drapery show marked similarities with Types 234 and 236, indicating a mid sixth century or slightly earlier date. Christ trampling the Serpent?

One example:

Orléans (found 1845); *Mem. soc. roy. antiq. France* xviii (1846) 256, pl. II, 9 (fr. of large dish, form uncertain).

239 Large, wearing a long robe with several horizontal bands below the waist; halo(?) round head; r. arm raised in salute or benediction; cross on staff held slightly diagonally in front of body by l. hand. The l. arm is outstretched, with a series of oval openings(?) on the sleeve. Feet splayed, with sandals. Style E (ii), probably second and third quarters of sixth century. Presumably represents Christ. Cf. Type 232 for pose. At least two versions. The better (and probably earlier) of these (=A) has the hair rendered by a row of large globules, with a line around; the r. hand is carefully rendered, coming up to about chin-level, while the cross is held level with the head. About ten neat lentoid motifs decorate the sleeve of the l. arm. The second version (B) is poorly stamped; the sleeve decoration is indistinct, and the hair is indicated by a few dots only; the r. hand is held slightly higher, and the cross projects above the head. A rather fine fr. may constitute a third version (C). Used singly, in association with Types 208, 257, 258. Vessel Form: 104.

Examples:

A In Rome, from Aricia=De Waal (1904) 310–311, no. 1, pl. II, 1; Leclercq (1907) 539, fig. 359; *DACL* xiv 1185, fig. 10350.

Similar: *Cat. Musée Lavigerie* iii 50, pl. XI, no. 1; Iacopi, *L'antro di Tiberio a Sperlonga* 159, fig. 159.

B FIG. 51 g Louvre, uncat. Similar: *Antioch* iv.i fig. 32.1.

C FIG. 51 h Louvre, uncat.

240 Similar, of stouter proportions, with l. arm bent at elbow and the cross held more obliquely. The r. hand is held high, and the top of the cross is level with the head; the hair consists of a row of globules and a wavy line. A cloak falls over the l. arm. Style E (ii); third quarter of sixth century(?).

Type

One example:

FIG. 51i British Museum 1963.7-4.1, once in a coll. in Syracuse; Garrucci, *Storia della arte cristiana* vi (Prato, 1880) pl. 466.1; De Waal (1904) 316–7 with fig. in text; Leclercq (1907) 539, fig. 360; *DACL* xiv 1185–6, fig. 10351 (Form 104A base; with Types 59, 253).

241 Related to **239**, with different drapery; l. arm outstretched, with row of openings on sleeve. Several drapery folds fall from l. arm. Style E (ii). Possibly part of same stamp as Type 239C.

One example (with upper parts missing):

FIG. 51j Tunis, Bardo, from Carthage; *Cat. Alaoui* (1910) 333, no. 912 (large dish fr.; with Type 177).

242 Group consisting of standing figure half-left, in long robe, with sandals, with a second smaller figure walking r. towards him.

One example, poorly preserved:

Form 104.9 (*q.v.*). Baradez offers a restoration of the group, interpreting it as Christ healing the blind man; certain features appearing to the l. of the walking figure are interpreted as part of a dog (Baradez (1967) 240).

Half-length figures

243 Frontal figure(?); very schematic, with area with two sets of cross-bars on body (clasped hands? rib-cage?), surrounded by a row of dots; eyes and a nose(?) visible. Possibly not meant as a human figure at all. Style D.

One example:

FIG. 45k Athens Agora, P 3592 (in band, repeated).

244 Frontal female(?) figure, with arms folded across waist, holding a small bird(?); hair indicated by globules; rendering crude. Style E (ii).

One example:

Sofiana, Sicily; *Boll. d'arte* xlviii (1963) 264, fig. 8 (large bowl or dish base; single stamp).

245 Frontal bust, with upper parts of arms only; V-motif on chest; rows of globules and wavy line indicate hair. Style E (ii).

One example:

FIG. 52a Benaki Mus. 12465 (flanking Type 235, *q.v.*).

Busts and heads

246 Frontal bust, cuirassed. Style E (ii); about second quarter–mid sixth century. Three versions, becoming progressively smaller and cruder:

A H. *c.* 5·5. Ears visible; ribbon-ends of a diadem flank head; diagonal drapery folds. An Imperial personage?

B H. *c.* 4·5. More schematic; ears obscured, no ribbons.

C H. *c.* 4·0. Similar; more or less straight drapery folds.

Used flanking human figures ('emperors' and saints). Vessel Forms: 103, 104A.

Examples:

A Form 103.5 (*q.v.*).

B Istros (see under Type 230A). Duplicate: *Antioch* iv.i. fig. 32.4.

C FIG. 52b Apollonia, Cyrenaica, Byzantine Palace (Form 104A base, with Type 234). Related: Schneider, *The Memorial of Moses on Mount Nebo* iii (1950) 105, no. 451, pl. 158A, 8=Bagatti (1953) 71, pl. XVIII, no. 2.

247 Frontal head with decorated cap. Style E (ii).

Example:

FIG. 52c Tunis, Bardo, from Carthage (perhaps Form 93B; single stamp).

Also: *Nessana* i pl. LIX A4.

248 Female bust(?) l.; hair tied in a bun. Style E.

One example:

FIG. 52d Athens Agora, P 3757.

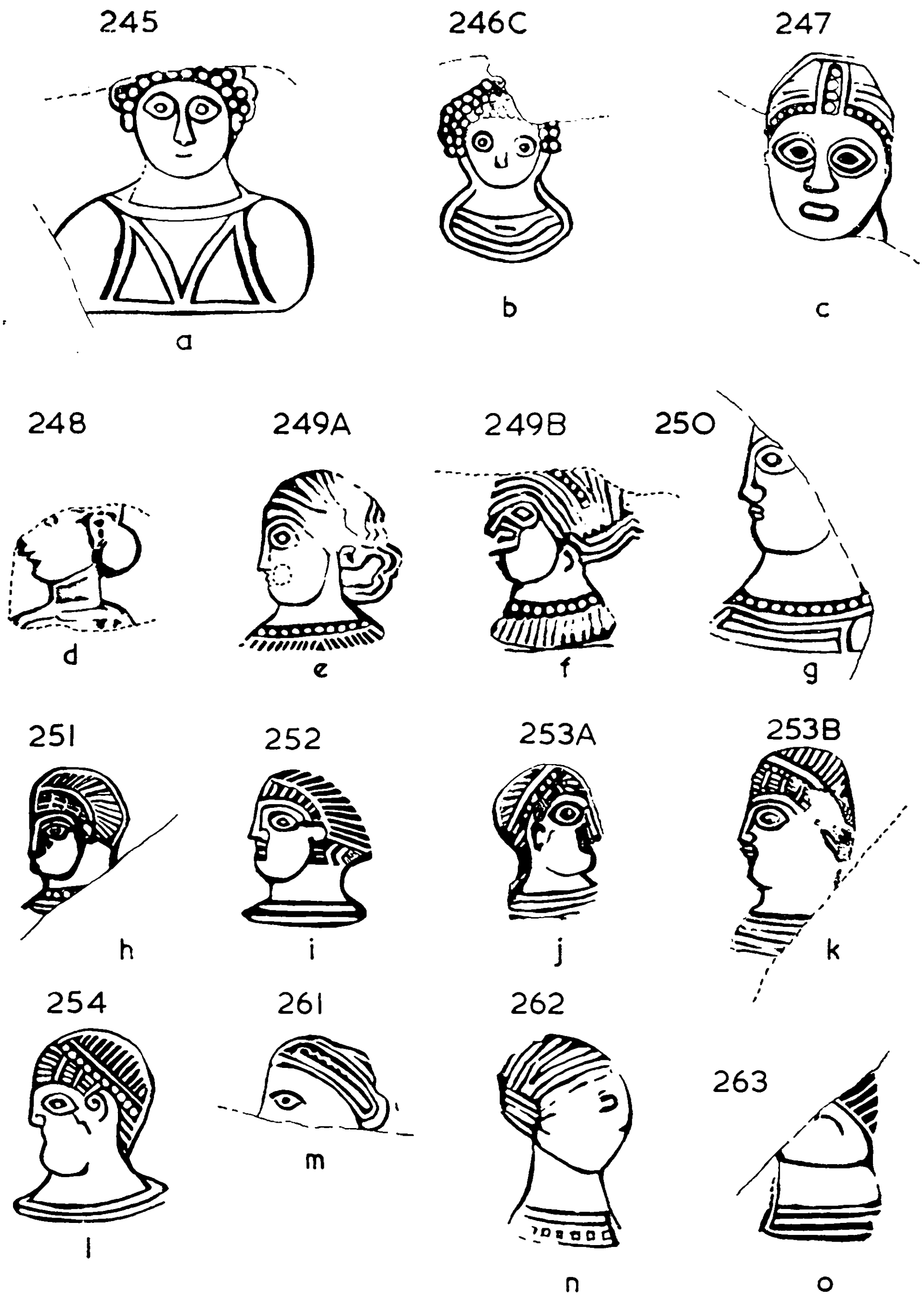


FIG. 52 Style E (ii) Scale 2 : 3

Type

249 Female head, in profile (to l.), with hair tied in a large bun and a 'diadem' consisting of a row of dots; heavy necklace comprising a row of dots above a row of short strokes (pendants?). Style E (ii); third quarter of sixth century or later. Used flanking a central motif. Vessel Form: 104.

Two versions; three examples:

A FIG. 52e Benaki Mus. 12464 (Form 104C base). Fair quality. Similar: *Antioch* iv.i fig. 30.17 (with Type 328).

B FIG. 52f Athens Agora, P 13377 (Form 104B base). Cruder.

250 Female head (to l.), large, with necklace of large dots, and drapery folds below, with shoulder indicated. Hair-style uncertain. Cf. Type 249A. Style E (ii).

One example:

FIG. 52g Benaki Mus. 12462 (large dish; single stamp at centre).

251 Similar (to l.), smaller, with hair waved at front, and large plait drawn forward over crown; necklace of dots. Style E (ii), early.

One example:

FIG. 52h Mainz, RGZM O 34832 (with Types 57, 124, *q.v.*).

252 Similar, simplified; vertical locks on brow; no necklace. Style E (ii); about third quarter of sixth century. Vessel Form: 104A.

Example:

FIG. 52i Benaki Mus. 12471 (three in row, with Type 123?).

Also: Apollonia, Cyrenaica, Byzantine Palace (with Type 224B).

253 Similar (to l. and r.), with short hair, held by a diadem of dots, waved in front and plain behind; four to six lines indicate neckline of dress. Style E (ii); *c.* 550–580+. Two versions; on the first (A) the hair is swept back on the crown, on the second and later variety (B) it stands up straight. Subsidiary motif; used with Types 59, 123, 224A, 240. Vessel Forms: 104A–B.

Examples:

A FIG. 52j British Museum 1963.7–4.1 (see under Type 240).

Also: Carthage, Lavigerie 47.38 (see under Type 224A); *Tarsus* i 276, figs. 166, 207, no. 820.

B FIG. 52k = Form 104.15.

254 As **253B**, rather larger; ear shown by a hook; three lines indicate neckline of dress. Style E (ii), probably late.

One example:

FIG. 52l Louvre, uncat. (single stamp, at centre).

255 Similar (to l.), with plain head-band. Style E (ii). Vessel-forms: large bowls.

Examples:

Cat. Musée Lavigerie iii 51, pl. XI, no. 8 (single stamp at centre).

Cf. *BAC*, 1943–45, 81, from Carthage (bowl base, with rosettes(?) above and below).

256 Similar, in cruder style (to r.); hair covers ear; large circular eye. Style E (ii).

One example: *Antioch* iv.i fig. 30.15.

257 Similar (to l.); no head-band; hair combed sideways at front, with a wave(?) over ear, and backwards over neck. Style E (ii). Used with Types 206, 239A.

One example:

Cat. Musée Lavigerie iii 50, pl. XI, no. 1.

258 Similar, cruder (to l.); no wave over ear, which is not indicated; large circular eye (cf. Type 256), thick neck. Style E (ii).

One example:

Antioch iv.i fig. 32.1 (with Type 239B).

259 As **252–253**, simplified, with hair short, combed straight back. Style E (ii).

One example: Form 104.14 (*q.v.*).

260 Female head (to r.); crude round-headed type with large circular eye; vertical strokes above the eye and horizontal strokes at back of head indicate hair; a thin head-band. Style E (ii). Subsidiary motif.

One example:

PLATE XVIII *a* British Museum 88.10–8.4 (see under Type 230B).

Type

261 Female head (to l.), with hair combed back, and shallow plait on crown(?); almond-shaped eye. One example (fragmentary):

FIG. 52m University of Michigan 20979, from Karanis (with Types 230B, 277).

262 Female head (to r.); large and poorly stamped, with hair swept back behind ear, and jewelled necklace. Style E (ii), late. Subsidiary motif. Vessel Forms: 104B, etc.

Examples:

FIG. 52n Athens Agora, P 7613 (with additions from a duplicate piece, P 12083). Used with Type 210, and a central standing figure of uncertain type; Form 104B base.

Also: *Antioch* iv.i fig. 32.5; Benaki Mus. 12467.

263 Female head (to l.), crude, with hair indicated by series of parallel lines(?). Cf. Type 262. Style E (ii).

One example:

FIG. 52o Abu Mena 66.1329 (single stamp at centre; Form 93B?).

For further human figures, see Schneider, *The Memorial of Moses on Mount Nebo* iii (1950) no. 449.

(Types 264–270 vacant)

* * *

Canthari

271 Small, highly stylized, with rim viewed from above; lines and dot-patterns on body. Style D

One example:

FIG. 45l Athens Agora P 25567 (flanked by birds of uncertain type; see drawing).

272 Small, with lobed body and spreading foot; no handles. Style E (i).

One example:

FIG. 53a Form 99.2 (*q.v.*).

273 Similar, with handles. Style E (i).

One example:

FIG. 53b Oudna; Gauckler, *BAC*, 1897, pl. VIII, 20 (Form 96/97 base).

274 Round-bodied with open mouth; S-shaped handles; foot in form of double volute. Style A (iii)/E (i).

One example:

FIG. 53c Tunis, Bardo, from Oudna = Gauckler, *BAC*, 1897, pl. IX, 18 (base as Form 80; stamp repeated four times, round centre).

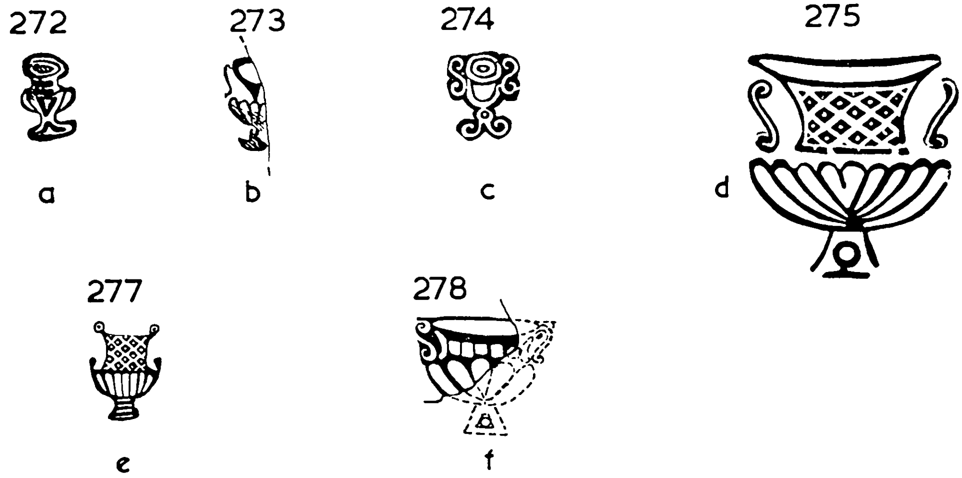


FIG. 53 Style E Scale 2 : 3

Type

275 Large, with nine-lobed body and dotted net-pattern on neck; small foot, bearing a circle; S-shaped handles. Style E (ii). Used singly.
One example:
FIG. 53d = Form 93.23 (*q.v.*).

276 Similar, more compact, with seven-lobed body, vertical grille-pattern on neck, and triangular flaring foot surmounted by ball-shaped element. Style E. Used singly (on Form 93 or the like).
One example:
Delattre (1888) 220, no. 8, fig. 2.

277 Small, seven-lobed, with dotted net-pattern on neck; knobs on rim and shoulder in place of handles; bars on foot. Style E (ii). Subsidiary motif.
One example:
FIG. 53e Univ. of Michigan 20979, from Karanis (Form 104A base, with Types 230B, 261).

278 Large, five-lobed, with short broad neck bearing row of squares; small foot, bearing a circle (cf. Type 275); short S-shaped handles. Style E (ii). Vessel Form: 104B?
Examples:
Delougaz, *Khirbat al-Karak* pls. 31.7, 61.1 (profile: pl. 53.41). Used flanking a central motif.
FIG. 53f British Institute at Ankara, sherd coll., from Seleucia (Silifke). Fragmentary; restored after the preceding piece.

(Types 279–280 vacant)

* * *

Crosses, etc. in hearts (cf. Types 115–16)

281 Chi-Rho in heart with double outline; two lobe-shaped motifs below arms of *chi*. Style A (iii). Stamp repeated in band round floor.
One example:
Istros; Popescu (1965) 714, figs. 13.9, 15.

282 Similar, with small chi-rho, upside-down; two indeterminate motifs in field. Style A (iii). Used as Type 281.
One example:
Delattre (1893) 39, no. 51, with fig. in text=*Cat. Musée Lavigerie* iii 51, pl. XI, no. 5; Leclercq (1907) 532, fig. 353 (same vessel?); *DACL* xiv 1178, fig. 10339.

283 I-X monogram in heart; two lines spring from its base, terminating in ovoid motifs. Style A (iii)/E (i). Used as Type 281.
One example:
FIG. 55a Carthage, Lavigerie (base of dish with high foot; cf. Forms 103A, 104A)

284 Cross in heart; two almond-shaped motifs flank base of cross, to which they are joined. Style A (iii)/E (i). Used repeated in band round floor. Vessel-forms: dishes, unclassified.
Examples:
FIG. 55b Carthage, Lavigerie (low-footed dish; possibly Form 86?).
c Louvre, uncat. (large dish fr., possibly as for Type 283).
Also: *Cat. Musée Lavigerie* 52, pl. XI, no. 14 (Delattre (1888) 220, no. 9).

285 Same; side-motifs not linked to cross. Style A (iii)/E (i). Used singly, at centre. Vessel Forms: 67 variant, 93A.
Examples:
FIG. 55d = Form 93.3.
Form 67.28.

Chi-Rho motifs

286 Chi-Rho in two circles (the outer one notched). Style A (iii).
One example:
FIG. 55e Benaki Mus. 12457 (form uncertain; with Type 5).

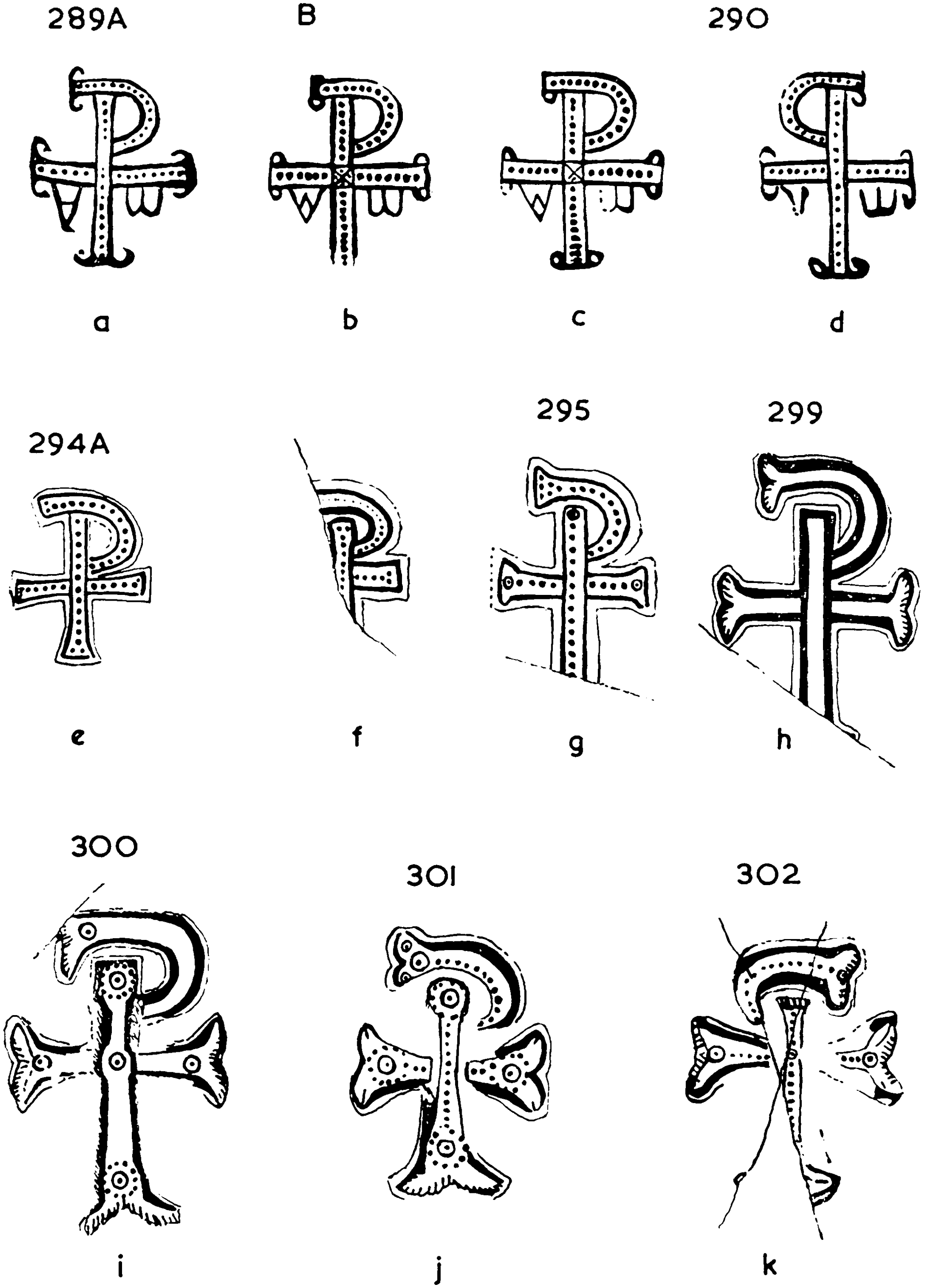


FIG. 54 Style D Scale 1 : 1

Type

287 Simple Chi-Rho (possibly I-X). Style D.
One example (top missing):
Rolland, *Saint-Blaise* i fig. 179 right (Form 83/84?).

288 Chi-Rho, reversed; row of fine dots on each arm, with two dots at extremities. Style probably D.
One example:
Cat. Musée Lavigerie iii 52, pl. XI, no. 13.

Cross-monogram

289 Slender, in simple outline, with decoration of fine dots; two small hooks at end of each arm, A and ω under left and right arms respectively (the A upside-down). Styles D and E (i); *c.* 460–520. Common. Two versions: A (early)—with vertical arm continuous, cutting off side arms, and straight-barred *alpha*. B (late)—with arms crossing each other, and small x at centre with dots in the interstices; broken-barred *alpha*. Used singly or in pairs, sometimes with a subsidiary motif round floor (Types 83, 101, 105, 111; with version A only). Vessel Forms: 84 (versions A and B), 96–98 (B only).

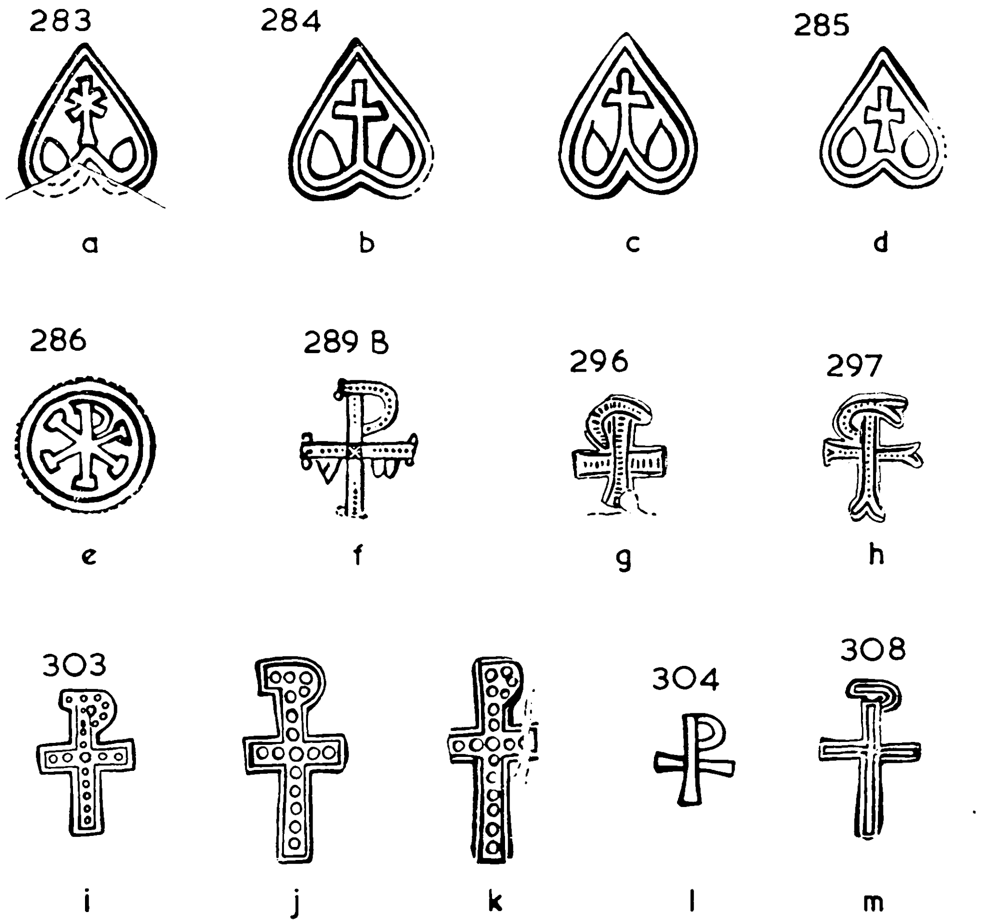


FIG. 55 Styles A (iii) and E (i) Scale 2 : 3

Type

Examples:

A FIG. 54a = Form 84.5.

Also: De Waal (1904) 311, no. 2, pl. III, 3; F. Benoît, *Les cimetières suburbains d'Arles dans l'antiquité chrétienne et au moyen âge* (Rome and Paris, 1935) fig. 12.2 (probably thus); Corinth CP 1617; Louvre, uncat. fr.

B FIG. 54b Louvre MNC 2320, from Lecourbe (see under Form 84.7). Form 84.7 similar.
c Louisville, Kentucky, Southern Baptist Coll., JE 61–172.
FIG. 55f = Form 96.1. Form 96.2 similar.

Also: Form 84.6, Form 97.3, 5, Form 98.4.
Cat. Musée Lavigerie iii 52, pl. XI, no. 16 (cf. Delattre (1888) 220, no. 17); *Sieglin Exped.* ii. 3, p. 115, fig. 125.8; *Gallia* xxii. 2 (1964) 607, fig. 63.
Cf. also Bagatti (1953) 73, pl. XVIII, no. 16, and the description of a stamp from Sousse by Vercoutre, *Rev. arch.* 3 iii (1884) 23.

290 As Type 289A, with the *rho* reversed. Style D.
One example:
FIG. 54d Benaki Mus. 12461 (with Type 175).

291 Similar, with dots in relief, and outline on side arms; three dots at top and bottom of vertical member. Style D or E (i).
One example:
De Waal (1904) 310, n. 1 with text fig. (on a bowl?).

292 Similar, with splayed ends and normal *rho*; relief dot decoration; upright A (broken-barred) under l. arm, ω under r. arm. Style E (i).
One example:
Oudna; Gauckler, *BAC*, 1897, pl. VIII, 7.

293 Broader, with relief outline and relief dot decoration; vertical arm continuous; fewer, larger dots, with pairs at each extremity; ω under l. arm, A under r. arm (in relief; the A is straight-barred). Style D; date probably as Type 289A.
One example:
Tarsus i 205, fig. 164 D (dish fr; with Type 111).

294 Similar, without *alpha* and *omega*. Style D; date as Type 295. Used with subsidiary motifs Types 125, 185, and alongside Type 295A. Vessel-forms: dishes (as 82–84).
Examples:
FIG. 54e Southern Baptist coll., Louisville, Kentucky, JE 61–171.
f British Museum 94.9–24.28 = Dalton, *BMCat. Early Christian Antiquities* 163 no. 927. Also: Strzygowski, *Koptische Kunst* 247, fig. 304, and perhaps Michałowski, *Faras* 1961–62 pl. L, 6.

295 As **294**, with small dot-and-circle motifs at extremities. Style D (–E (i)?); close to A.D. 500?
Two versions, of similar date:
A with top of *rho* square-ended, with pattern of dots.
B with top of *rho* flaring and pointed.
Used with Types 120 var., 125, 185, 294. Vessel Forms: dishes as 82–84, 96 variant.
Examples:
A FIG. 54g British Museum 94.9–24.28 (see Type 294). Probably similar: Form 96.9.
B *Temples of Armant* pl. LXXXII, SSCH 1.

296 Similar, debased, with *rho* reversed; decoration of short bars. Style E (i).
One example:
FIG. 55g Tunis, Bardo, from Oudna (base as Form 99).

297 Similar, with *rho* reversed, and fish-tailed arms; plain dotted decoration. Style E (i).
Examples:
FIG. 55h Tunis, Bardo, from Oudna (base as Forms 96–97). A second example on base as Form 80. Gauckler, *BAC*, 1897, pl. VIII, 9.
Also: Delattre (1888) 220, no. 18, fig. 3 (*Cat. Musée Lavigerie* iii 52, pl. XI, no. 11).

Type

298 Large, lightly impressed, with broad arms, in simple outline. Fringed circles at centre and extremities, and dot-and-circle motifs attached to corners of arms; possibly impressed separately. Two palm-shaped pendants, composed of series of dots, hang from arms. Unclassified; perhaps mid fifth century.
One example:
Form 89.4 (*q.v.*).
For a similar cross-monogram, see Form 56.8.

299 With heavy relief outlines and hollow centres; vertical arm continuous; splayed extremities, with light feather-like decoration. Style D. Vessel-forms: dishes.
Example:
FIG. 54h Benaki Mus. 12446.
Also: Wulff, *Altchristliche Bildwerke* 293, pl. LXXII, no. 1560.

300 Similar, with fringed circle motifs added at centre and extremities. Style D, late.
Example:
FIG. 54i Benaki Mus. 12435 (Form 84 variant; with Type 127).
Also: Form 82.8.

301 Similar, with dotted decoration; fringed circles at extremities, and three dot-and-circle motifs at top end of *rho*. Style D, late.
Two examples (differing slightly):
FIG. 54j Benaki Mus. 12451 (three, side by side, surrounded by rouletting). Centre plain.
Bisson de la Roque, *Medamoud 1929* 63, fig. 63, inv. 3439 bis 6 (with Type 127). Dot-and-circle motif at centre.
Elaborate variant (no dots on cross): 'Abd el-Mohsen, *Ptolemaic and Roman Baths of Kom el-Ahmar* pl. XXXII, bottom r.

302 Similar, with *rho* reversed; dotted, with dot-and-circle motifs at centre and extremities. Style D, late.
One example:
FIG. 54k Mainz, RGZM, under O 17567. Drawing restored from two stamps.

303 With double outline and small *rho;* ornamented with small circles. Style E (i); early sixth century. Several versions. Normally accompanied by birds of Type 195; also alone. Vessel Forms: 103?, 104A, and unclassified.
Examples:
FIG. 55i Tunis, Bardo, from Carthage (dish base, perhaps Form 103; small decorated zone).
Similar: Rolland, *Saint-Blaise* i fig. 180; *Cat. Musée Lavigerie* iii 50, pl. XI, no. 4.
Different stamp: Form 104.7–8, *q.v.*
FIG. 55j Carthage, Lavigerie.
k Louvre, uncat. Similar: Louvre, MNB 3195–2.

304 Small plain cross-monogram; vertical member continuous, with *rho* attached to side. Style A (iii).
One example:
FIG. 55l Tunis, Bardo, from Carthage (with Type 116).

305 Similar, with small circle at centre. Style E (i).
One example:
Baradez (1967) 244, no. 18, fig. on p. 247 (bowl base; single stamp).

306 Similar to **304**, with relief outline; *rho* reversed. Style E (i).
One example:
Antioch iv.i fig. 30.6 (bowl base; single stamp).

307 As **305**, with double outline. Style A (iii)/E (i).
One example:
Zeiss (1933) 467–8, fig. 1.3 (large dish; with Type 193).

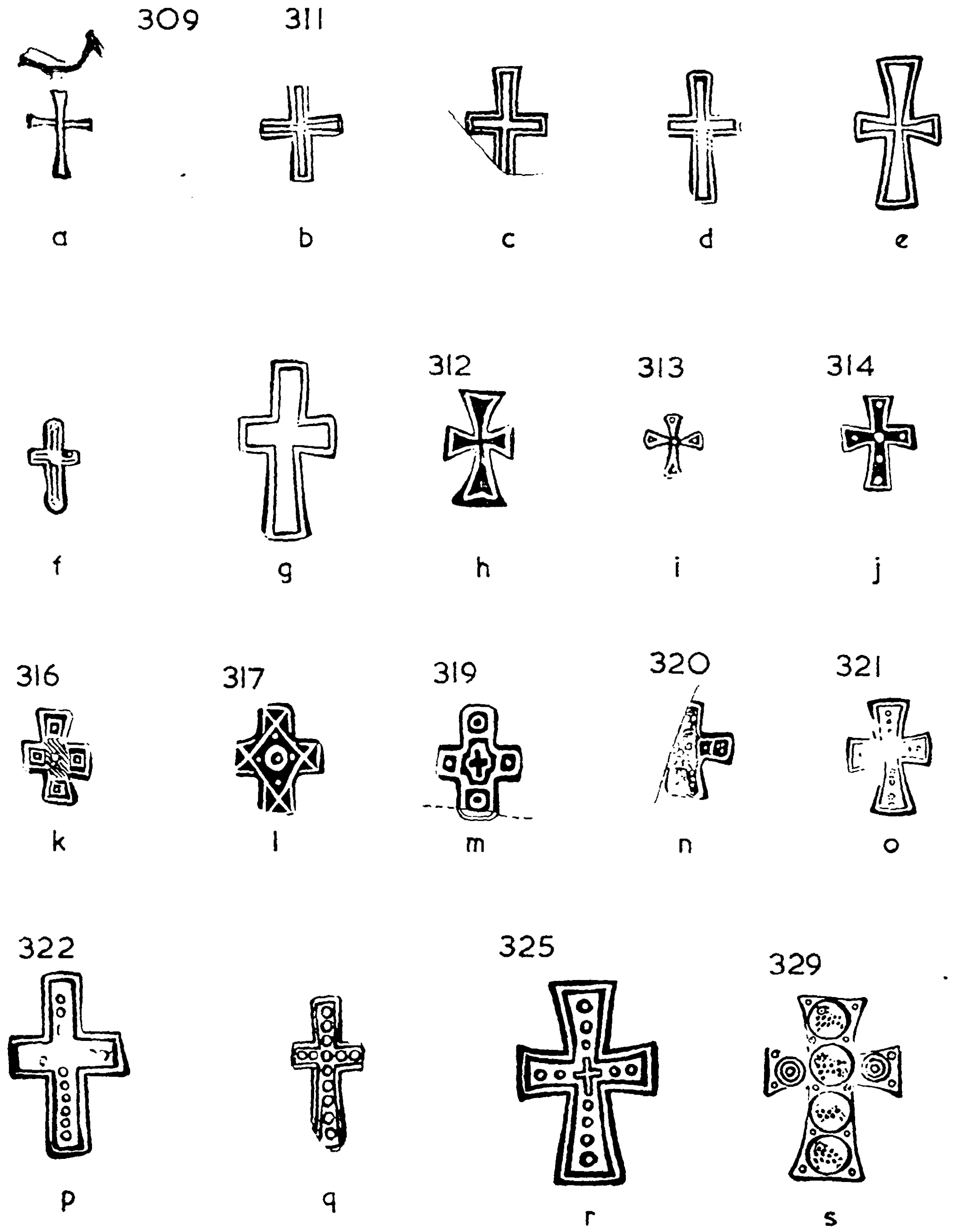


FIG. 56 Style E (i) Scale 2 : 3

Type

308 With simple double outline; small *rho*, carried across top. Style E (i); early sixth century. Used singly. Vessel-forms: bowls.
Examples:
FIG. 55m Form 99.1 (*q.v.*).
Clerc and d'Agnel (1904) 82, pl. VIII, 8 (bowl base).
See also Form 104.18 (late version; Style E (ii)).

Crosses

309 Small plain cross, surmounted by a highly stylized bird. Style E (i). Used singly.
Examples:
FIG. 56a = Form 87.2.
Similar: Rolland, *Saint-Blaise* i fig. 179 bottom l.

310 Cross with double outline; arms intersect each other. Style E (i).
Examples:
Form 98.1 (*q.v.*).
Similar: Clerc and d'Agnel (1904) 83, pl. VIII, 6, from Marseille=*Bull. soc. antiq. France,* 1945–47, 246, pl. II, fig. 1 b (with Type 91 variant).

311 Cross with double outline. Style E (i); end fifth(?)-early sixth century. Several sizes (H. *c.* 2·4–4·5); no clear development. Mainly used alone; also with Types 195, 323. Vessel Forms: 93, 96/97?, 99A; also dishes (104?).
Examples:
FIG. 56b = Form 99.4. Similar: Louvre MNB 3195–4.
FIG. 56c Louvre MNB 3195–6 (with Type 195).
d Tunis, Bardo, from Carthage (base as Forms 96–97).
e = Form 99.5.
Also: Form 93.22, Form 99.3; *Bull. soc. antiq. France,* 1945–47, 246, pl. II, fig. 1 a; *Antioch* iv.i fig. 31 bottom (late).
Variants:
FIG. 56f Tunis, Bardo, from Oudna; perhaps same as Gauckler, *BAC,* 1897, pl. VIII. 2. Small and thin.
FIG. 56g Form 99.13=Univ. of Michigan 20067. Broad (cf. Type 321).
Delattre (1888) 220, no. 20, fig. 4 (with circle at centre); *ibid.* no. 21 may be the standard type.

312 Cross with relief outline; broad vertical member, short side arms, all splayed. Style E (ii).
One example:
FIG. 56h = Form 101.3.

313 Small, with flaring arms; relief dot at centre and on each arm. Style E (i).
One example:
FIG. 56i Tunis, Bardo, from Oudna=Gauckler, *BAC,* 1897, pl. VIII, 19 (base as Forms 96–97).

314 Similar, with relief outline; dots at centre and extremities, two on lower arm. Style E (i).
One example:
FIG. 56j Tunis, Bardo, from Oudna=*ibid.* pl. VIII, 1 (not drawn correctly). Base as Forms 96–97.

315 Small, round-ended (like a four-petalled rosette), with double outline; dot and circle at centre. Style E (i). On bowls.
Examples:
Gauckler, *BAC,* 1897, pl. VIII, 2, from Oudna (if this is not the same as the variant of Type 311 noted above); *Temples of Armant* pl. LXXXII, SSCG 12.

316 Greek cross, jewelled; relief outline, circle and dot at centre, square and dot in each arm. Style E (i)/(ii). Vessel Form: 99B.
Examples:
FIG. 56k = Form 99.16.
Antioch iv.i fig. 30.5 (=pl. X, shape LB 12).

Type

317 Small, with relief outline; trellis pattern, enclosing circle and dots at centre. Style E (i)/(ii). On bowls.

Examples:

FIG. 56l Tunis, Bardo, from Oudna=Gauckler, *BAC*, 1897, pl. VIII, 5 (base as Form 99).

Similar: *Antioch* iv.i fig. 30.4.

318 Similar, with lines and dots on arms, circles and dots at centre. Style E (i)/(ii).

One example:

Form 95.2 (*q.v.*).

319 Similar; arms boxed off, with dot or circle in each; tiny cross at centre. Style E (i)/(ii).

Examples:

FIG. 56m Tunis, Bardo, from Oudna (base as Form 95?).

A duplicate on base as Form 99. Gauckler, *BAC*, 1897, pl. VIII, 3.

320 Similar; arms boxed off, with dot patterns. Style E (i)/(ii).

One example:

FIG. 56n Athens Agora, P 22363.

321 Small and broad, with double outline; decoration of small circles. Style E (i).

One example:

FIG. 56o = Form 96.8, from Oudna; possibly same as Gauckler, *BAC*, 1897, pl. VIII, 13.

Variant, larger, with two small double circles at each extremity; rest of scheme uncertain:

Baradez (1967) 243, fig. on p. 245, no. 14 (bowl base; single stamp).

Similar: Carthage, Lavigerie, uncat. (Form 104A base; with Type 172).

322 Medium-sized, with double outline; ornamented with small circles. Style E (i); early sixth century. Most have fairly long side-arms, bearing three circles. Usually flanked by birds (Types 195, 197); sometimes alone. Vessel Forms: 103–104 or similar.

Example:

FIG. 56p Louvre, MNB 3190, from Cherchel=A. Ravoisie, *Exploration scientifique de l'Algérie pendant les années 1840–1842* iii, pl. 44, F VII. Flanked by three birds, Type 197, and surrounded by triple groove (D. 12·8 only; cf. Form 104.9).

Similar: *Cat. Musée Lavigerie* iii 50, 52, pl. XI, nos. 2, 12 (2=Delattre (1888) 220, no. 26, fig. 5); Baradez (1967) fig. on p. 239, no. 7.

Variants: FIG. 56q Louvre, uncat. (base of large dish (103–104?); used in band round floor, between two triple grooves). Short arms.

Delattre (1888) 220, no. 28, fig. 6 (flanked by three birds of Type 195). Rather large circles.

323 Similar, large and elongated (H. *c.* 9), with large circles. Two circles on each side arm. Style E (ii), early. Used with Types 122, 234, 311; also alone. Vessel Forms: 104A, C.

Examples:

Istanbul, Ayasofya Müzesi 561 (see under Type 234).

FIG. 57f Univ. of Michigan 20984, from Karanis (Form 104C base; single stamp).

Also: *Antioch* iv.i, fig. 31 bottom; *Nessana* i pl. LIX C6.

Late variant: Form 104.20 (*q.v.*). Arms broader, more splayed.

324 Rather small, with rounded outline; leaf-spray on each arm, radiating from circle at centre. Style E (i)?

One example:

Oudna; Gauckler, *BAC*, 1897, pl. VIII, 14.

325 As **322**, with small cross at centre. Style E (i). Used alone, singly or repeated.

Example:

FIG. 56r = Form 103.4 (*q.v.*).

Also: Baradez (1967) 244, fig. on p. 247, no. 17 (Form 98 or 99).

326 As **322**, with decoration of double circles. Style E (ii); about second quarter of sixth century. Used with Types 208, 231.

One example: Form 104.5 (*q.v.*).

Type

327 With double outline; 'jewelled' decoration of double circles (one at centre, two on lower arm, one on other arms). Cf. Type 326. Style E (i)/(ii); probably second quarter of sixth century. Used singly.
One example: Form 97.6 (*q.v.*).

328 Similar, with 'jewelled' decoration of double diamonds and double circles (arranged as on **327**). Style E (ii). Two versions: A. with diamonds at centre, circles on arms. B. with circles at centre, diamonds on arms. Used with Type 249A, or singly.
Examples:
A FIG. 57a Tunis, Bardo, from Carthage (bowl, unclassified form).
B De Waal (1904) 311, no. 5, pl. II, 3=*DACL* xiv 1182, fig. 10344.
Antioch iv.i fig. 30.17 (dish fr.).

329 With single outline, medium-sized; broad splaying arms; four circular panels on vertical arm, each containing a lamb-motif; concentric circle motif on each side arm; small circles in the interstices. Style E (i) or (ii).
Examples:
Gallia xxii. 2 (1964) 609, fig. 58, from Mariana, Corsica (dish fr.; stamp off-centre). Lambs clearly visible.
FIG. 56s Vatican, Museo Sacro 1331, from Porta Maggiore, Rome; *Bull. arch. crist.*, 1871, pp. 76–77, pl. VI. 3; *DACL* xiv 1182, fig. 10343, (dish fr., unclassified; single stamp). Lambs reduced to a meaningless pattern of dots.
Variant: Delattre (1888) 221, fig. 7, no. 29; *DACL* xiv 1182, fig. 10342. Three panels with lambs; a small diamond between lower two.

330 With double outline; decoration of diamonds (with tiny circles at centres), with dots in interstices.[1] Fairly large; H. *c.* 5·5. Style E (ii), about second quarter of sixth century. Used alone, or with birds (Types 200, 201, 208). Vessel Forms: 103(A?), 104A.
Examples:
PLATE XVIII*b*=Form 104.2 (*q.v.*).
FIG. 57b Vienna, Kunsthistorisches Museum, uncat. (see under Type 200).
Also: Clerc and d'Agnel (1904) 83, pl. VIII, 3, from Marseille; Tunis, Bardo, from Carthage (two examples).

331 Similar, rather large (H. 6–7), decorated with diamonds with dotted centres. Style E (ii), early. Two diamonds on each side arm and on upper arm. Two main versions: A. with four diamonds on lower arm. B. with three diamonds on lower arm. Used with Types 172, 209B, 210, 231; also alone. Vessel Forms: 103A–B, 104A, and probably 93B.
Examples:
A FIG. 57c = Form 103.3 (*q.v.*).
Form 104.6.
Clerc and d'Agnel (1904) 83–84, pl. VIII, 7; *Gallia* xxiv. 2, p. 451, fig. 4; Baradez (1967) 242–3, fig. on p. 241, no. 12.
B FIG. 57d = Form 103.8 (*q.v.*).
Ampurias v (1943) 75, pl. XVIII, fig. 40 centre r.; Baradez (1967) 242, fig. on p. 241, no. 11.

332 With double outline; decoration of diamonds with circles at centres (at centre, two above, one on each side, three below); size as **330**. Style E (ii).
One example:
Baradez (1967) 243–4, fig. on p. 245, no. 16 (base as Form 93?; single stamp).

333 As **331**, larger and more elongated (H. *c.* 11), with only one diamond on each side-arm; small circles in the diamonds. Style E (ii), late. Used with Types 18, 210; also alone. Vessel Form: 104B.
Example:
FIG. 57e = Form 104.21.
Also: Form 104.19; *Antioch* iv.i fig. 30.7; Carthage, Lavigerie (on display); Corfu, Roman Baths (1960).

[1] For a copy in Egyptian 'A' ware, see p. 396.

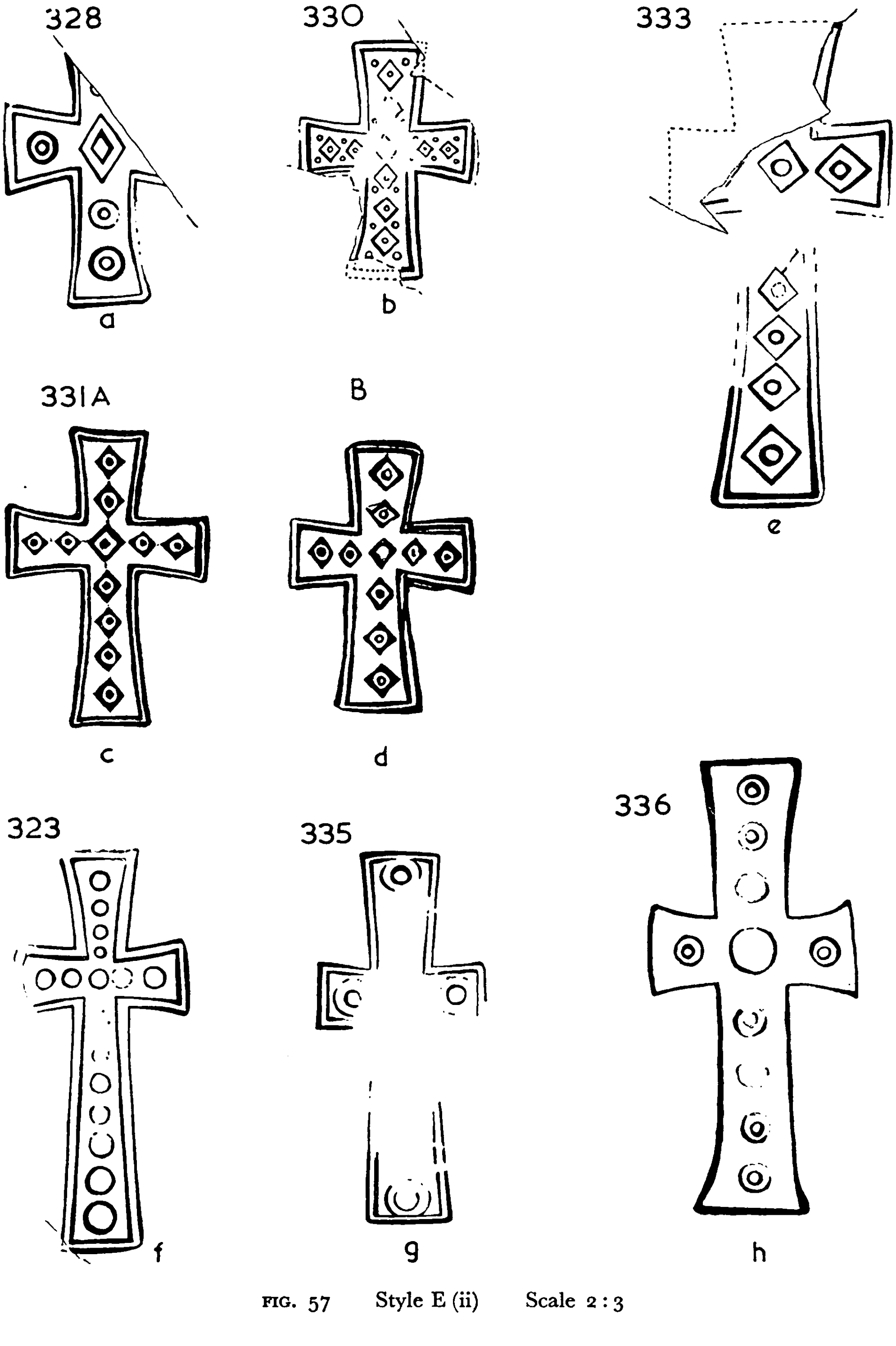


FIG. 57 Style E (ii) Scale 2 : 3

Type

334 Similar, with single outline; diamonds have dot at centre. Style E (ii), late. Used with Type 18 and alone. Vessel-form: 104C?

Examples:

Tarsus i 205, figs. 164 C, 208 BB; *Antioch* iv.i fig. 30.7 (probably this Type). Related: *Nessana* i pl. LIX, C 4, C 5.

335 Large, with double outline; short side-arms; decoration of double circles (only one to each side-arm). Style E (ii), mid sixth century.

One example (poorly impressed):

FIG. 57g = Form 104.11 (*q.v.*).

336 Similar, with single outline (cf. Type 334); plain circle at centre. Style E (ii), late. Used singly.

One example:

FIG. 57h = Form 104.16 (*q.v.*).

For further cross-motifs (fragmentary), see Baradez (1967) nos. 6, 15, figs. on pp. 239, 245. Cf. also Type 147 (swastika).

VARIOUS DECORATION

The other forms of decoration found on African R.S. Ware comprise grooves, rouletting, barbotine leaves, gouging, notches, punched knobs and burnished patterns.

Grooving, being so elementary a feature of pottery decoration, may in general be passed over without further comment; the patterns found on each vessel-form are noted in the Catalogue above. However, two arrangements deserve further mention. The first is that referred to in the Catalogue as the 'triple groove'. This consists of two narrow grooves flanking a broad shallow central one. It is a common feature of vessels with stamped decoration of Style A, and also on Forms 56 and 89A, being the preferred form of border to the decorated area (see PLATES XII and XIII). The scheme is clearly copied from the lathe-turned borders found on metalware, in particular on Late Imperial silver dishes, which frequently show the same arrangement.[1] Variants are the 'quadruple groove', in which the central broad groove is doubled, and the 'quintuple groove', in effect a doubling of the normal scheme, with three narrow and two broad grooves (see Form 61.7, 13, FIGS. 16–17); the latter is quite common. On Form 62 a further variant occurs: the central groove is sometimes replaced by a recessed convex moulding (see for example Form 62.15). The 'triple groove' reappears on Forms 103–104 as a border to decoration in Style E (see PLATE XVII *a*). Here, however, the central element is as often as not a flat recessed band; on other examples the central groove is omitted, leaving a pair of grooves about 1 cm. apart. Again one may point to silverware as the prototype, for similar grooving occurs on the series of sixth–seventh-century dishes with niello cross patterns.[2] The small offset combined with groove at the edge of the floor of many dishes and bowls of fourth to sixth century date also derives from silverware and the like. The second distinctive use of grooving is that current on Forms

[1] Cf. the Cesena dish (P. E. Arias, 'Il piatto argenteo di Cesena', *Annuario sc. Atene* xxiv–xxvi (1950) 309–44; Strong (1966) pl. 58), and the closely related pieces from Concesti, Kaiseraugst and Mildenhall (L. Matzulewitsch, *Byzantinische Antike* (1929) 135–6, pls. 47–48; R. Laur-Belart, *ILN*, 14 July 1962, 70, figs. 8–9; *The Mildenhall Treasure* no. 4, pl. 3).

[2] E.g. Dodd (1961) nos. 12, 32–33, 36 ff.

82–84. This comprises sets of close-set fine grooves, often incorporating a broader groove or sloping inset band, or a narrow band of rouletting (see PLATE XVI *c*). This may derive from the scheme of grooving found on silver dishes such as Mildenhall no. 4 and the Sutton Hoo plate,[1] whose delicate linear niello decoration may also have influenced Style D. The sets of circles or small mouldings found at the centres of some examples of Forms 67, 82–84, etc. (see PLATE XVI *b*, *c*) may also be counted as imitations of the lathe-turned decoration found on metalware.

Rouletting is not a constant feature of the ware; it appears at various times in different guises, and in some phases is completely absent. Four types of rouletting may be distinguished:

1 Narrow bands, often consisting of a single line only. The normal arrangement on the early series (Forms 4–10, 12–13, 20–22, and related closed forms), current from about the end of the first century until around the middle of the second. Found only spasmodically on later forms (see Forms 45A, 82 and 90 (between grooves), 91C). Some late plates have similar rouletting on the foot: see examples of Forms 89B and 105. PLATES III–VII, *passim*.

2 Broad bands (usually executed in a single motion). Rather uncommon. Found on a few closed vessels of about late second to early third century date (see Forms 137–139), and also on some early pieces of Form 45. Perhaps a development of (1). PLATE IV.

3 'Double rouletted band'. I apply this term to a scheme of two lines of rouletting with oblique strokes running in opposite directions separated by a groove. This appears to be an adaptation of a wreath motif and is presumably copied from metalware.[2] Its *floruit* is the end of the fourth century and the beginning of the fifth, though it survives until around the end of the century on Form 89B. It is a standard element on Forms 62A and 68, surrounding stamped decoration of Style B, and occasionally appears with Style A decoration on Form 67.[3] On Form 89 it is used both on the floor and on the foot (degenerating into scheme (1) on some late examples). FIG. 20 (Form 68.1) and FIG. 25.

4 'Feather-rouletting'. This is described on p. 14 above; it too seems to be a conscious effort to reproduce silverware decoration, in this case the fluting, often curved, which characterizes many pieces of Late Roman silver plate.[4] Feather-rouletting is common from the late fourth century until early in the sixth, appearing on the insides of Forms 53B and 91–92, and the outsides of Forms 81–85. Similar rouletting is found on the rims of the bowls Form 96; a silver bowl of similar shape in Baltimore, which has an imbricated pattern on the rim, may provide a prototype in this case.[5] The decline of this type of

[1] *The Mildenhall Treasure*, pl. 3; Dodd (1961) no. 4 with further refs. cited.

[2] For this motif on metalware, cf. for example Curle (1923) no. 69, pl. XXIV (on rim), and Dodd (1961), no. 5.

[3] Several frs. from the Athenian Agora; cf. Form 67.4.

[4] E.g. the bowl Mildenhall no. 12 (*The Mildenhall Treasure*, pl. 5a), Traprain no. 19 (Curle (1923) pls. XV, XXXV), Dalton (1901) 79–80, nos. 358–9, pl. XXI; also a number of later pieces.

[5] Baltimore Museum of Art 40.33; M. C. Ross, *Archaeology* 6.1 (Spring 1953) 41, with fig. Similar imbrication on the goblets Mildenhall nos. 16–17 (*The Mildenhall Treasure* pl. 7b).

rouletting may be observed on Form 91, where it degenerates during the sixth century into a narrow band. FIGS. 13, 23, 26.

Further evidence of the strong influence of metalware products during the fourth and fifth centuries is to be seen in the use of gouging, notching and punching. The distinctive gouged decoration of the fourth-century Form 59A suggests the fluting found on metal vessels of the period;[1] its introduction, coinciding with that of stamped decoration, heralds a new wave of influence from that source. How exactly it was executed is not clear, if, as seems likely, the dishes of this form were mould-made, for it generally causes small ridges on the inside of the vessel which one might expect to have been smoothed off during manufacture. It is clear that the gouging was done before the vessel was slipped.

Notching is confined to the lips of bowls (and a few dishes) with broad flaring rims. Its origin may be traced in the hollow beading characteristic of silver and bronze bowls of similar shape (Drexel type 4), common in the fourth century.[2] Here it appears on the late fourth–early fifth-century fine-ware series (see Forms 71–73, 75–76). On the pottery examples it is not used to supplement relief decoration, but rather as an alternative. The normal scheme comprises groups of notches alternating with plain stretches; continuous notching is rather rare.

Another derivative of the hollow beading on metalware is the punched dot decoration sometimes found together with the notching just mentioned. This appears on the broad flat rim-surfaces of Forms 72 and 75, either as a line of small knobs, continuous or broken, in the middle of the rim, or as small groups arranged in triangular formations. These knobs were punched up from below, where deep circular holes are to be seen, generally set in a slight groove. This kind of decoration appears to be characteristic of the early fifth century (though Form 72.1 may be a little earlier); it is relatively uncommon, and can hardly have been in fashion for long.

The barbotine leaves found on Forms 2 and 3 are, like the vessel-forms themselves, directly copied from South Gaulish ware. The leaves are of the normal Gaulish type, lacking the additional dots found on contemporary Italian products. No later African products have this kind of decoration.

On a small number of late examples of R.S. Ware a part of the surface is polished or burnished to a higher degree than the rest, producing a slight distinction in colour (see Form 87.1 for an example). Simple burnished patterns are sometimes added on the rougher areas. Form 109 bears a late version of this kind of decoration, consisting of a thin burnished band forming a continuous spiral from rim to floor ('spiral burnishing').

ARTISTIC CONNECTIONS

From the third century onwards the decorated North African wares lie close to the mainstream of Late Roman decorative art, and are open to influence from several sources. By far the most important contacts are with contemporary silverware, though occasional similarities with ivories, textile decoration and coins may be

[1] See note 4 opposite; cf. also Dodd no. 87.

[2] See Drexel (1909) 186–7, pl. VI; *The Mildenhall Treasure*, nos. 7–12, pls. 4, 5a; Curle (1923) nos. 22–27, 35, pls. XIV, XXII, etc.; Dodd (1961) nos. 81–82, 85; Strong (1966) 203, pl. 66B.

detected; in contrast, links with the glassware of the period are minimal. One may suspect that much of this apparent influence, especially individual motifs, came at second hand via the books of patterns which (as has now become evident) must have circulated widely at this time among craftsmen working in a variety of different media. African R.S. Ware, in turn, supplied the models which other potters copied.

External influences on vessel-forms and the minor decorative elements are noted above; here I shall concentrate on the Late Roman sources for the stamped and relief decoration.

As noted at various points above, the relief-decorated pieces mirror successive phases in the large series of silver plates and bowls decorated with animal friezes first studied by Drexel.[1] Close copies of third-century examples are present in Form 35.1 and Form 48.11.[2] The series of fourth-century bowls of Drexel's form 4 are copied in Form 52B, though the decoration is much simplified; in addition, the beading on these bowls is copied on some plain vessels (see above). The earliest phase in the series is unrepresented, but close copies may be observed in a small series of red-slipped plates and trays whose relationship to the African series is at present obscure.[3]

The relief decoration on Form 56 exhibits many of the typical features of fourth-century art, with its emphasis on continuous narrative and its rather stunted, stylized figures (except in deliberately classicizing scenes such as that of Pegasus and the Nymphs). The animal chase motifs on the rims of some pieces have connections with the silverware just mentioned, and also the series of decorated marble 'table-tops' studied by Xyngopoulos and Snyder,[4] for which a late third–early fourth century date has been proposed. The iconography of the Achilles legend (rim-motif *viii*) bears a certain resemblance to that on the Achilles dish from Kaiseraugst[5] and is quite closely paralleled on a number of the marble 'table-tops', as Weitzmann has pointed out.[6]

The Jonah cycle (rim-motif *xi*) recalls those present on a number of fourth-century monuments; the Adam and Eve scene on Form 53.4 belongs to the same *milieu*.[7] Further connections exist with ivory diptychs of the early fifth century and a series of Pannonian bronze mountings of the later fourth century, as has been shown by Salomonson (1962). The form and general layout of these dishes find fairly close parallels in the silver *lances* from Corbridge and Risley.[8] Technical

[1] Drexel (1909) *passim*.

[2] Cf. Walters, *BMCat. Silver Plate* (1921) no. 75; Drexel (1909) form 1 (esp. 189–90, no. 34, pl. IX 2).

[3] For examples see Toynbee (1957) pls. I–III *passim;* Vermaseren and Van Essen (1965) 483–8, nos. 146–7, figs. 400–4, pl. CXXIX 1–2. Some similar frs. from the Athenian Agora.

[4] A. Xyngopoulos, *Eph. Arch.*, 1914, 70–84; G. A. S. Snyder, 'The So-Called Puteal in the Capitoline Museum at Rome', *JRS* xiii (1923) 56–68.

[5] R. Laur-Belart, *ILN*, 21 July 1962, 99, figs. 1–7; *id.*, *Le trésor d'argent d'époque romaine tardive de Kaiseraugst/Argovie: Catalogue* (1964) 8–13, figs. 1–5; Salomonson (1962) 80, pl. XXVIII, 5; Strong (1966) 197, pl. 59.

[6] K. Weitzmann, *Ancient Book Illumination* (Cambridge, Mass., 1959) 56–57, pl. XXIX, figs. 63–65.

[7] Jonah: cf. the scene on the often cited Lateran sarcophagus (Volbach and Hirmer (1961) pl. 40 top; etc.). Adam and Eve: cf. the rendering on the sarcophagus of Junius Bassus (*ibid.* pl. 43).

[8] F. Haverfield, 'Roman Silver in Northumberland', *JRS* iv (1914) 1–12; G. Morin, 'Le Missorium de Saint Exupère', *MEFR* xviii (1898) 363–79, pl. X; Salomonson (1962) 56, pl. XII (with further refs.); Strong (1966) 198, pl. 61. The Corbridge *lanx* may form part of the same (Greek) group as the Kaiseraugst Achilles dish (n. 5 above), indicating a source of influence independent of the series of dishes with animal friezes.

details copied include the *pointillé* decoration characteristic of fourth-century silverware, astragal borders,[1] bead frames, and the outlining of lettering in inscriptions and of crosses.[2]

The series of decorated closed vessels Forms 171–9 and the open bowls of Forms 39 and 53 are more difficult to parallel. The latter may be related to a series of glass bowls with engraved decoration;[3] the former seem to represent a more or less purely local development, though the idea of appliqué decoration could be borrowed from metalware.

The origins of the stamped decoration on the North African wares are far from clear. This type of decoration, which characterizes mainly the coarser versions of the ware, seems to owe much less to contemporary fashions in metalware. The radiating palm-branch patterns of Styles A-C appear to be without parallel in any other contemporary art-medium and may be classed as a local African peculiarity; palm-motifs of a rather different kind occur on the earlier appliqué-decorated series. The concentric circle and fringed circle motifs may be borrowed from bone- and ivory-carving, where they occur regularly; a decorated comb from Carthage offers a convenient North African parallel,[4] and other good fourth-century pieces with similar decoration include the caskets from Heilbronn and Richborough.[5] The only silverware dishes to come at all close to the early African stamped series are the engraved and niello-decorated series grouped around the Cesena dish (see p. 281 n. 1 above, which are in fact more closely copied in the Gaulish *TS grise*[6] than in African R.S. Ware. In any case, the actual motifs used on the African dishes are not comparable. It seems likely, then, that the stamped series is an original creation of certain African potters, Style A(i) being the starting-point for the whole series.

The additional motifs which appear on the second and third generations of stamped vessels suggest another possible source of influence. Patterns such as the quatrefoil, the decorated square and circular motifs and the rosette in circles may have been copied from textiles; one may observe very similar motifs carved on the drapery of the figures on the Theodosius *missorium* and ivory diptychs of the same period.[7]

Close parallels to Style D decoration are very few—mainly, I suspect, on account of the general lack of examples of decorated metalware of mid to late fifth-century date. The small linear stamps of Style D suggest fresh influence from metalware, perhaps from the niello-decorated series.[8] Types 125–7 may be compared with

[1] See a few frs. of the Achilles cycle (rim-motif *viii*), for example Weitzmann, *op. cit.* fig. 64, and Salomonson (1962) pls. XXVII 1 and XXVIII 4.

[2] For outlined lettering on silverware similar to that on Form 56.10–11, cf. the Theodosius *missorium* (Volbach and Hirmer (1961) pl. 53, with refs.), one of the Constantius II *missoria* from Kerch (Matzulewitsch, *op. cit.* 94, pl. 25), two dishes from Carthage (Dalton (1901) nos. 358–9, pl. XXI) and the Proiecta casket (Volbach and Hirmer (1961) pl. 116, with refs.). For similar outlined crosses (as on Form 56.23–24), cf. the casket-lids from Luxor (Strzygowski, *Koptische Kunst* (1904) 341–5, nos. 7202–4, figs. 418–19, pl. XXXIX).

[3] Cf. *Masterpieces of Glass* (British Museum, 1968) nos. 95–97, dated to the fourth century.

[4] Delattre, *Cat. Musée Lavigerie* iii, pl. VII, 1–2.

[5] P. Goessler, 'Das frühchristliche Beinkästchen von Heilbronn', *Germania* xvi (1932) 294–9; J. P. Bushe-Fox, *Richborough* iv 152, no. 276, pl. LVII. The latter also shows a variant of the 'petal' pattern.

[6] Cf. Rigoir form 1, with stamped decoration and notching on the rim.

[7] Theodosius *missorium*: Volbach and Hirmer (1961) pl. 53, with bibl. cited. Ivories: see R. Delbrueck, *Die Consulardiptychen und verwandte Denkmäler* (Berlin, 1929) nos. 3, 45, reproduced by Salomonson (1962) pl. XIX, 2, 4.

[8] Cf. *The Mildenhall Treasure* no. 4, pl. 3, and the Sutton Hoo plate, Dodd (1961) no. 4.

the gouged fluting found on the Cesena dish, an earlier example of the same series,[1] and on the rim of a dish from Antioch (Daphne).[2] Continued copying of pointillé decoration seems indicated by the dot-fillers on cross-monograms and other motifs. The largely formal range of patterns is in keeping with other fifth-century decorative work.

The stamped dishes of the sixth century are also considerably influenced by contemporary metalwork. The layout of Form 104 has already been mentioned (see p. 281 above); to this one may add the figured scenes, which seem to be a direct reflection of the renewed interest in figured subjects observable on Justinianic silverware.[3] The source of these new motifs would appear to be Constantinople itself, and their introduction may coincide with Justinian's reconquest of Africa (though a slightly earlier date is possible). It is to be noted that the only piece of silverware of this period which can be ascribed to Carthage[4] is not appreciably closer in style to the R.S. Ware pieces than are the metropolitan examples. A particularly close parallel to the earlier examples of Style E (ii) is provided by a dish in the Hermitage.[5] This bears a large jewelled cross (cf. Type 330) flanked by two angels having much in common with the series of 'saints' with crosses (cf. especially Types 239–40). The hair of the angels, arranged in rows of tight curls, provides a plausible model for the characteristic rendering of the hair of Types 224, 230, 239–40, 246, etc., with its rows of globules.[6]

The reappearance of secular—even pagan—motifs on these dishes is of particular interest. The Bacchic figures (Types 223–4, etc.) and Cupids (Type 227) seem to reflect a renewed interest in mythological subjects as decorative motifs, which is also evident on the silverware of the late sixth and early seventh centuries. Apparently such motifs had become acceptable again after a century or so during which Christian motifs had predominated to the virtual exclusion of all others; one is probably justified in ascribing this to plain antiquarianism. The Bacchus-motif Type 223 goes back to early Imperial models.[7] The Imperial figure of Type 230 may be inspired by monumental sculpture; the rendering is close to that of the famous Barletta statue.[8]

The series of female busts in Style E (ii) (Types 248–63) are unusual as motifs, but their hairstyles find parallels in contemporary works of art, confirming their sixth-century date. Representations on coins, ivories and the like indicate that in the fifth and early sixth centuries the normal hairstyle was one comprising a series of waves over the brow, held down by a bandeau or diadem, and perhaps clips at the front, and a heavy plait behind, drawn up from the nape of the neck over the

[1] See p. 281 n. 1 above.

[2] Worcester (Mass.) Art Museum, 1940.17; M. C. Ross, *Archaeology* 6.1 (Spring 1953) 40, with fig. in text.

[3] Cf. Dodd (1961) nos. 7, 9, 16, and numerous later pieces.

[4] *Ibid.* no. 93 (dated A.D. 541).

[5] Volbach and Hirmer (1961) 358–9, pl. 245 (with bibl. cited).

[6] A similar treatment of the hair may be seen on the Barberini diptych (*ibid.* pl. 219), the Meleager plate (*Enciclopedia dell'arte antica* iv 984, fig. 1174), and a dish from Cyprus portraying a saint (Dalton (1901) no. 398, pl. XXIV; Volbach and Hirmer (1961) pl. 249; Dodd (1961) no. 78).

[7] Cf. especially S. Reinach, *Répertoire de la statuaire grecque et romaine* i (1897) 376, no. 1579. A similar motif occurs on a number of mosaics: e.g. *Boll. d'arte* 50 (1965) p. 208, fig. 36 (from Tyndarus, Sicily). For a general discussion of the motif see D. Levi, *Antioch Mosaic Pavements* 40–45.

[8] Volbach and Hirmer (1961) 325, pls. 69–71, with bibliography. The stamped version may offer a hint as to the date of this enigmatic statue—could Justinian himself be the figure depicted?

crown.[1] Types 251–2 seem to copy this. On the mosaics of San Vitale a change may be seen; the attendants of the Empress Theodora have a simpler *coiffure*, in which the hair is waved at the front, as before, but held down behind by a close-fitting cap or hair-net or covered with a veil. The same trend is evident on some sixth-century representations of the Virgin, such as those on the throne of Maximianus at Ravenna (of *c.* 550) and on a diptych of similar date in Berlin.[2] This later style is the normal one present in Style E (ii); see Types 253 ff. The heavy jewellery shown on some of these busts and heads is also at home in the sixth century.[3]

The late arrival of cross-motifs on the stamped ware seems to have been due to current fashions in decoration rather than anything else, for early versions such as the *Chi-Rho*, rare on the stamped pots, are common enough on the related lamp series at a fairly early date. The cross-monograms, common from the mid fifth century until the early sixth, are of the normal Western type with closed *rho*, in contrast to those on contemporary examples of Late Roman C Ware.[4] The large jewelled crosses of Style E (ii) reflect a sixth-century fashion; they represent humble copies of the great ceremonial crosses such as that of Justin II preserved in the Vatican.[5]

FABRICS

African Red Slip Ware comprises a number of related fabrics sharing the general characteristics described above. Two classifications of these fabrics have been proposed, by Waagé[6] and Lamboglia.[7] Neither is entirely satisfactory, but they serve to distinguish the main classes. I do not intend to propose a new classification here; what follows is rather an analysis of the range of fabrics present at various times during the history of the ware.

Waagé distinguishes a finer and a coarser series, which he names *Late Roman A* and *B* wares respectively. *Late Roman A* comprises the fine-grained smooth-surfaced wares common between the third and the fifth century; some decline in quality is noted in the case of the later examples. *Late Roman B* represents the more standard coarser-grained varieties. Waagé distinguishes three phases in the development of the latter: an early phase (roughly second–third century), in which the slip covers the whole of the surface, a middle one (fourth–fifth century), marked by more variety in colour and a thinner slip, applied over the inside and rim only, and a final phase (sixth–seventh century), in which the partial slip-coating becomes thicker and smoother (like that of the early series). A few pieces of about fourth-century date which share features with both wares are classed as 'Intermediate'. The close relationship between the two wares (*Late A* and *Late B*) is stressed, and they are clearly separated from the various Eastern fabrics classified as *Late C, D* and *E*.

Lamboglia's classification is fourfold (*t.s. chiara A-D)*, but fails to make a clear

[1] For examples, see coins of Verina and Ariadne and the bust of Ariadne on a diptych of 517 (Volbach and Hirmer (1961) pl. 220).

[2] *Ibid.* pls. 230–1, 225.

[3] For similar jewellery, see the female figures on the Theodora mosaic at San Vitale.

[4] For a discussion of the distribution of the various types of cross-monogram, see M. A. Frantz, 'The Provenance of the Open Rho in the Christian Monograms', *AJA* xxxiii (1929) 10–26.

[5] A. Grabar, *Byzantium from the death of Theodosius to the rise of Islam* (1966) pl. 359.

[6] Waagé (1933) 294 ff.; Waagé (1948) 43 ff.

[7] Lamboglia (1958), (1963). The main characteristics are also summarized by Lamboglia in *Albintimilium* i 29.

distinction between African and contemporary Gaulish products. Three of his classes ('A', 'C' and 'D') are African, corresponding to Waagé's wares; however, the fourth ('B') must be dismissed as a Gaulish fabric (see discussion below, pp. 402–3). Of the African classes, *t.s. chiara A* corresponds broadly to the early phase of Waagé's *Late B* ware (with overall slip-coating), Lamboglia's 'C' to Waagé's 'Late A' (fine fabric), and Lamboglia's 'D' to the middle and late phases of Waagé's 'Late B' (with partial slip-coating). Of these, *t.s. chiara A* undergoes certain changes (the slip becomes duller); any developments in the 'D' fabric are, however, masked by Lamboglia's incorrect datings for its later examples. Lamboglia also admits some intermediate fabrics (in particular in his description of the 'C' ware).[1] Further elaborations of this system are proposed by Salomonson and Carandini.[2] These two rival classifications serve to indicate the main developments in the ware and provide us with a basic threefold distinction, valid in the case of most examples of the ware, which may be summarized as follows:

1 Late B ware (early phase) = t.s. chiara A (late first–third century).
2 Late A ware = t.s. chiara C (third–fifth century).
3 Late B ware (middle and late phases) = t.s. chiara D (fourth–seventh century).

Rearranged, this gives the following chronological framework:[3]

<table>
<tr><th>Phase</th><th>Date</th><th>Fine version</th><th colspan="2">Normal version</th></tr>
<tr><td>I</td><td>Late first–mid third century +</td><td>—</td><td colspan="2">Late B, early phase = t.s.c. 'A'</td></tr>
<tr><td>II</td><td>fourth–fifth century</td><td>Late A = t.s.c. 'C' (third–fifth century)</td><td>Late B, middle phase</td><td rowspan="2">t.s.c. 'D'</td></tr>
<tr><td>III</td><td>sixth–seventh century</td><td>—</td><td>Late B, late phase</td></tr>
</table>

The above schemes do not, however, exhaust the range of fabrics present in the ware (as Waagé and Lamboglia have themselves shown by noting pieces of intermediate wares). Several varieties of the basic wares and one or two classes not previously noted can in fact be distinguished; they are not, however, sufficiently clear-cut to justify a completely new classification of the African wares by fabric. In general, particular varieties of fabric tend to be associated with particular vessel forms, by which they are more readily distinguished; hence I have preferred to make my basic classification of the ware by forms. These sub-groups probably represent the products of different factories within the main manufacturing region, though some may be due to differences in manufacturing techniques (for which see below, pp. 292–5).

* * *

[1] See Lamboglia (1963) 155.
[2] Salomonson (1968); *Ostia* i (1969) 28 ff.
[3] This is the scheme which I have used in classifying the sherd material from the British School at Rome's South Etruria Survey; see *PBSR* xxxiii (1965) 110–12, fig. 8, and notes in subsequent vols.

The earliest fabric in the Red Slip Ware series, corresponding to Lamboglia's 'A' ware, is an orange-red or brick-red ware of granular texture and medium thickness with a slip of similar colour; it is merely a slipped version of the cooking-ware which precedes it (see Forms 191 ff. above), and presumably comes from the same factories. Fine quartz particles, some fine lime and a little mica are present, producing rough breaks and, frequently, a rather pimply surface. The slip covers the whole of the surface; this is of good quality and normally slightly lustrous, in a few cases (mainly early?) attaining a glossy appearance quite close to that of Gaulish *terra sigillata*. Fine hair lines visible on the surface of many vessels indicate careful polishing of the slip. On some overfired examples the surface of the slip tends to flake off, or has a slightly mottled appearance. This is the normal fabric from the late first century until late in the second, employed for a wide range of open and closed forms.[1]

On later examples of this ware (roughly late second–mid third century) the slip tends to become thinner and duller, and the surface correspondingly rougher. A more pinkish tone is not uncommon. This development is noted by Lamboglia.[2] The main vessel forms showing these features are the later versions of Forms 8, 9 and 14, the dishes Forms 16 and 27, and some examples of the third-century Forms 31, 44 and the like. A similar thin dull slip is typical of the casseroles Form 23, some of which are earlier in date; these are perhaps to be regarded rather as successors of the earlier cooking-ware. On this form alone the exterior of the rim and wall is regularly fired grey, indicating probably that it did not merit the careful firing given to the tablewares.

A series of vessels of early–mid third-century date, mostly large dishes, have a thicker brighter slip. The body-clay of these is on the coarse side and mostly rather thick, contrasting markedly with the thick lustrous slip; fine tooling-marks attest careful smoothing. There is a slight tendency for the slip to flake off. These pieces appear to represent the products of new rival factories, producing a similar range of forms to the old-established ones; some vessel-types appear in both wares. Forms 18, 28–33 frequently exhibit this fabric, which is included by Lamboglia under his 'A' series.[3]

The first examples of the finer ware constituting Waagé's *Late Roman A* and Lamboglia's 'C' ware appear about A.D. 200 or shortly after. They may indicate a change in manufacturing techniques (see below, pp. 293–5). They are characterized by a thinner purer fabric and a thinner smoother slip. Examples of the first half of the third century are rather varied in character, marking the transition from the earlier coarser fabric to the characteristic 'Late A' or 't.s. chiara C' ware; Lamboglia classes some as 'A/C' ware. Some retain the rather thick lustrous slip of the early series, and are of slightly granular texture;[4] others have a very pure splintery clay with a thin smooth glossy slip.[5] All, however, tend to be thin-walled (around 3–4 mm.). A glossy vermilion slip is typical of the series of appliqué-decorated closed vessels and bowls of this period (Forms 171–179, and Forms 36–41); this is shared by some pieces of Forms 43–44 and early examples of Form 45, which appears

[1] T.s. chiara A¹ (Carandini).

[2] Lamboglia (1958) 296. This is Salomonson's variety *b* (1968, p. 97), Carandini's 'A²'.

[3] Carandini's 'A/D' fabric (cf. description given in *Ostia* i 32).

[4] T.s. chiara A/C (Salomonson, Carandini).

[5] Cf. Carandini's 'C¹' fabric.

to be their successor. On the other hand, pieces such as Form 42.1 and some early examples of Form 48 exhibit the smooth-surfaced splintery fabric characteristic of the later 'Late Roman A' products, though the slip on these early pieces tends to be more shiny.

The typical fine 'Late Roman A' ware evolves by the middle of the third century.[1] This is a fine pure ware, of the texture of *terra sigillata,* with smooth surfaces and a thin slip, usually matt in appearance. The clay tends to be laminated and to splinter, but is otherwise clean-breaking; it is often pinkish rather than orange-red in colour. Only occasional specks of lime and mica are visible; whether this is due to the use of a fine-grained alluvial clay or to careful levigation is not clear. The potting is thin (normal wall-thickness about 2–5 mm.), even in the case of very large examples. Surfaces are smooth, with fine tool-marks visible in places, particularly on the outside around the foot; the insides appear to be finished off with a fine brush. Fine horizontal scratches appear on the outsides of some examples. The slip is generally very thin, with a slight lustre, and tends to merge with the body-clay; it is sometimes impossible to distinguish it from mere wet-smoothing of the surface. Some early examples are given a complete slip-coating, but on most the slip extends over the inside and the upper part of the outside only, with an irregular lower edge. On some mid third-century vessels (e.g. Form 50.11, 12 and 14) a little slip is brushed over the underside. This fabric is current from about 240 to 320/330; the normal vessel-forms are the dishes and plates Forms 48–50, together with a few small bowls (Form 43 and related).

The bowls of Form 45, of similar date, exhibit a rather different fabric, equally thin, but slightly granular in appearance. These would appear to be later products of the centre which produced the series of early third-century appliqué-decorated wares. The slip, which covers the whole surface, is fairly glossy, and often has a finely mottled or marbled appearance.[2] Later specimens (late third–early fourth century) tend to be rather harder-fired; the clay and slip of these have a markedly brownish appearance, and the slip is dull. These features, and the unusual grass-impressions found on the bottoms of some examples, suggest a link with the later Form 68. A few late appliqué-decorated jugs and flagons (e.g. Form 172.26), a few examples of Form 50 (e.g. No. 46) and some small bowls (e.g. Form 44.13) exhibit similar features.

A second phase of the fine 'Late Roman A' fabric can be seen in the later examples of Form 50, and a whole series of small bowls (Forms 52–53 and 71 ff.).[3] The ware of these pieces is not quite as fine as that of the earlier series, and the potting not quite so thin (mostly around 3–5 mm.). The clay, though clean-breaking, is faintly granular, and less inclined to splinter; the slip is generally a little thicker, with a matt appearance, and covers the inside and the upper part of the outside only. The normal colours range from a medium red or pinkish tone to a deep red-brown or purplish-red, indicating a harder firing of many examples. Surfaces are mostly smooth, often with prominent turning-marks at the base of the wall and fine brush-marks on the inside (cf. the earlier series). However, many of the numerous small bowls with flat rims exhibit irregular ridges and brush-marks on the underside

[1] Carandini's 'C^2' fabric.

[2] This is noted on the Dura-Europos frs.; see Cox (1949) 15, under nos. 92–93.

[3] Cf. Carandini's 'C^3' fabric.

of the rim, a feature which seems to be linked with the manufacturing process (see below, p. 294). This fabric is common during the fourth century and the first half of the fifth.

Some dishes of late fourth- to fifth-century date exhibit a slightly poorer, thicker version of the same ware. These are mostly softer-fired, orange-red, red or pinkish in colour, with a slightly granular clay containing some lime. Walls are of medium thickness (around 5–7 mm.). The slip is applied more thickly, and has a more or less lustrous appearance; surfaces are well smoothed. Typical vessel-forms are Forms 55–56, 62B; some bowls of Forms 73–74 and some late examples of Form 52 may be classed with them.

The standard coarser fabric of the fourth and fifth centuries, constituting Waagé's 'Late B' ware (middle phase), and most of Lamboglia's 'D' ware, appears to be the direct successor of the normal early ware (Lamboglia's 'A' ware), the main difference being that the slip no longer covers all of the exterior. The clay varies from finely granular to coarse in texture, the earlier examples being on the whole the best; the ware is at first of medium thickness, sometimes quite thin, but tends to get thicker (about 6–9 mm.) as time goes on. The slip, which varies in thickness, tends to be less lustrous than that of the early ware; a pinkish tinge, perhaps the result of harder firing, is quite common, along with normal orange-red and brick-red colours. Fine tooling-marks are visible on some of the larger pieces, particularly on exterior surfaces; other pieces exhibit a rather pimply surface. The hair-lines characteristic of the earlier series are less in evidence, indicating less careful polishing. This ware is employed mostly for large flat-based dishes (Forms 58B–61, 63–65) and large shallow bowls (Form 67); it first appears *c.* A.D. 300. The series of dishes Form 32/58 (see under Form 58), with their dull slip and generally poor finish, appear to form a connecting link with the earlier series. The improved quality of early fourth century examples may be due to the influence of the finer 'Late Roman A' series; new manufacturing techniques may also have been responsible (see p. 295).

A series of fifth- and early sixth-century pieces with a similar body-clay exhibit a thick, bright, highly polished slip, similar in appearance to that of the early third-century series mentioned above, and with a similar tendency to flake. These contrast markedly with the dull-surfaced vessels of the main series. The body-clay of these pieces tends to be coarse-grained and is mostly rather poorly fired, with a tendency to an orange or light brownish colour. The surfaces show tooling-marks, and the slip tends to have a burnished appearance. Occasionally areas of the surface are left rough and decorated with lightly burnished patterns. The standard vessel-forms are dishes of Form 61B and 87; some bowls (Forms 78–80, 98?) seem related.

In addition to the standard 'Late Roman A' and 'B' Wares, a third fabric is common in the period *c.* 350–450. It is used mostly for a series of large—often very large—dishes and bowls (Forms 62A, 68, etc.); some small bowls (Form 70) also occur. The clay is pure and fine-grained, breaking fairly cleanly; it is normally hard-fired, dull maroon to deep brownish-red in colour. Small lime inclusions, which show up clearly against the dark colour of the clay, are fairly common, but other impurities are few. Surfaces are carefully smoothed. The slip, which covers the inside and the upper part of the outside, is thin and lacking in lustre. Sometimes a little slip is splashed across the bottom, producing streaks or a criss-cross pattern;

under this grass- or straw-impressions are often visible. The larger vessels have rather thick walls (around 7–10 mm.); smaller ones are of medium thickness. This ware, which has apparently not been noticed before, would seem to be a later version of the fabric used for Form 45 (see description above), sharing with it features such as the dark colour and the characteristic grass-marks. The main difference is in the smoother surfaces of the later pieces.

A third group in the fine-ware ('Late Roman A') series is represented by Forms 82–85. The fabric of these is on average rather finer and thinner than that of the preceding types; the clay tends again to be splintery (as on third-century examples), the slip is mostly thin and smooth, and the forms have a metallic sharpness. Slight tooling-marks occur on the walls, inside and outside. This fine fabric is most common during the mid–late fifth century. A number of large plates and dishes of fifth- to early sixth-century date (Forms 88–89) are related in ware, but have a rather thicker and more lustrous slip, similar to that of the pieces of fourth–fifth century date noted above.

During the late fifth and sixth centuries two versions of the standard ('Late Roman B') ware are current. The first, characterized by a rather thin dull slip and a tendency to pimply surfaces, appears to be a simple continuation of the 'Late B' ware common in the fourth century (i.e. Waagé's middle phase). Most examples of Form 93 are of this ware, which reappears in the late (early seventh century) Form 107. A link with the earlier series is provided by the dishes of Form 76. The second version, which is far more common, has a thicker, semi-lustrous polished slip, more or less identical in appearance with that of the earliest African products. This is combined with a rather coarse ware in which lime is the predominant impurity. Its colour is regularly orange-red or brick-red, as that of the early series; the slip frequently ends at the lower edge of the rim. A characteristic of this ware is the smoothing of the unslipped exterior with a brush, producing a finely corrugated surface. This feature is commonest on the smaller vessels; the undersides of the larger dishes often bear tooling-marks instead. The standard vessel-forms for this series are Forms 91, 94–106. Some early examples are quite fine, not unlike the 'Late Roman A' series, but later ones are of much poorer quality, with poorly levigated clay, roughly finished surfaces and walls ranging up to 12 mm. in thickness. The series continues until the final disappearance of the African products in the second half of the seventh century. A variant of this ware, common in the seventh century, has spiral linear burnishing in place of the regular slip (see Form 109).

MANUFACTURE

SHAPING

The evidence for how African Red Slip Ware was made comes almost entirely from the vessels themselves. The earlier products and closed shapes may be passed over rapidly, for they present few problems. It may be assumed, on the basis of their general appearance, that these were wheel-made, the low feet (which are not always regular) being turned off on a wheel when the vessels were half-dry. The decoration (rouletting, barbotine or appliqués) was no doubt added at this stage, and

the slip applied by a process of total immersion in a prepared solution. The pots would then have been left to dry prior to firing.

When one turns to the later Red Slip Ware products, however, this simple manufacturing process is inadequate to explain all the peculiarities which have been noted above; some, at least, must have been made by a different process. It is well known that the decorated forms of Italian and Gaulish *terra sigillata,* the great majority of Roman lamps and terracottas, and a number of other classes of Roman decorated and plastic vases[1] were made with the aid of moulds, so it may legitimately be asked whether the same was not true of some of the African products also. This seems to have been the case, though the exact extent to which moulds were employed is none too clear. The mere commonness of the African wares is no argument against it, for the other wares were also mass-produced. Admittedly, the few inadequate descriptions of finds from potters' workshops in North Africa contain no clear references to moulds for making pots (the mention of 'formes' and 'moules' at Uthina[2] may refer to lamp-moulds), but in the face of the evidence from the vessels themselves this need not deter us.

The prime evidence for the use of moulds is provided by the rectangular dishes of Form 56. These, which are obviously not wheel-made, were probably made with the aid of pairs of moulds. Quite a number of pieces with identical decorative schemes occur, indicating that the whole of the upper surface was manufactured in one piece, from a single mould. However, in several cases the same basic compositions appear either with or without a frame, in isolation or combined with subsidiary motifs (cf. the various versions of the Pegasus motif, Form 56.12–16), so several related moulds must have existed. In the case of the rim-motifs, both longer and shorter versions of the same compositions appear, tailored to fit the size of the dish concerned (cf. the Achilles cycles on Form 56.18 and 20). In other instances motifs are transferred from rim to floor or *vice versa* (e.g. the Circe panels and the medallion motifs). This would indicate that for every major series (e.g. the Pegasus dishes and the Achilles dishes) the makers produced from a series of single punches or plaques (for the central compositions) a quantity of parallel moulds of varying sizes, each bearing a complete scheme of decoration for floor and rim. Each of these moulds would have been used for a large number of dishes; hence the exact parallels which are present among the existing dish-fragments. In some cases freehand details appear to have been added; for instance, the lettering on two Benaki Museum pieces (Form 56.10; Salomonson (1962) pl. XXI, 1–2) shows slight variations—perhaps again an example of the use of parallel moulds. A large stock of such moulds would in any case have been required in order to maintain continuous production, as the newly made pieces required time to dry out. It seems likely that a second mould was used for the bottom of each piece; the smooth undersides of the dishes themselves, with their sharp articulations, suggest that they were pressed against a flat surface rather than smoothed down. Thus the clay was probably squeezed between the two moulds while in a moist state.

Proceeding from here, one finds evidence for the possible use of moulds on many other pieces. The cut-out rims of Form 54, with their chamfered edges, and the fretted rim of Form 42.1 seem best explained by having been cast in moulds, in

[1] For examples, see p. 411 below.

[2] Gauckler, *BAC,* 1897, 454.

which case one must assume that the vessels as a whole were so made. This leads one to consider the 'Late Roman A' series as a whole, which has certain points in common with these—the tiny feet, sharply articulated profiles, smooth exteriors with fine scratches, etc. Technical considerations make it very likely that the series of large plates and dishes Forms 48–50 (especially Form 50) were made in moulds. Numerous examples of these dishes combine large size (a diameter of up to 40 cm.) with extreme thinness (3 mm. or even less). Though the initial forming of such shapes as Form 50 on a simple potter's wheel would be easy enough, it is very difficult to imagine how the final turning of the foot and underside could be achieved without mishap, for one would expect that the broad unsupported floor of the half-dry vessel would collapse under the pressure of the turning-implement, or that the potter would pierce the floor at some point in his effort to achieve the desired thinness. Yet the floors of these dishes are generally of a remarkably even thickness, with extremely smooth undersides. True, many pieces are warped, but this appears always to have occurred after the finishing of the vessel, whether during drying or during firing. It is thus fair to assume that the dishes were made in moulds attached to potters' wheels, as was decorated *terra sigillata*. The fine regular striations around the base may thus be seen as imprints of the mould, and the fine scratches, which appear on the outside only, will have been caused by small particles adhering to the mould as it rotated (a similar feature is to be observed on Late Roman C ware). The minute foot-rings show one of the limitations of the technique: the foot was necessary to provide a stable bottom to the vessel, but at the same time it had to be as small as possible to avoid fouling the encasing mould as the dish dried and shrank. On later pieces in the series (e.g. Forms 82–84; cf. also Form 56 above) the problem was met by having a tapering foot. Similar features may be observed on the bowls in this series; the bodies of these, feet included, appear to have been thrown in moulds, the rims being added freehand, the irregular undersides of these contrasting markedly with the smooth finish of the exterior in general. In some cases (e.g. Form 53, but not Form 52) the moulds may be seen as having provided support while applied decoration was added to the pot. In short, it would seem that the whole of the fine-ware 'Late Roman A' series was made with the aid of moulds, and that most of its distinctive features are to be attributed to this fact.

The manner of application of the slip on these vessels is also revealing. Unlike the earlier series, they are not given a complete slip-coating, but the slip ends at an ill-defined point on the outside, usually just below the rim, but sometimes lower down, leaving the base uncoated. No simple dipping process would produce this result, nor would application with a brush. The bottom must have remained covered up during the process, as is shown by the subsequent application of slip to this area with a brush seen on a few examples (see Form 50.11–12, 14). I therefore suggest that the slip was applied to these vessels while they were drying inside moulds, presumably by pouring the slip on from above, draining off the excess and, if necessary, finishing off the process on the exposed areas with a brush. The extent to which the slip could penetrate down the outside of the vessel would then depend on how much shrinkage had occurred during drying, and would naturally vary from vessel to vessel. Some of the early 'Late Roman A' vessels have a complete slip-coating, indicating that they were removed from their moulds beforehand, but

this practice was obviously discontinued, perhaps in order to minimize warping, for the vessels cannot have been completely dry when the slip-coating was applied.

Many of the other African products of the fourth and fifth centuries may also have been made in this way, though here the evidence is not so conclusive. Such features as the curious base-form of Forms 58–61 may have been dictated by the use of moulds, which are particularly well suited to the production of such broad shallow dishes. The clean-cut exteriors of Form 68 and many pieces of Form 67 point to a similar process of manufacture. It is worth noting that though the body-clay of many of these vessels is coarse, their exteriors are generally smooth even where not covered with slip, which seems to indicate that they have been pressed against some smooth surface. An interesting feature of many examples of Forms 45, 62 and 68 is the appearance of grass- or straw-impressions on the bottom under the slip-coating. This suggests that they were removed from their moulds and put out in the open to dry before the slip was applied.

The methods of manufacture of the late series of dishes and bowls (late fifth century onwards) are not clear, but moulds may have been used in some cases. It is possible that some of the larger dishes and plates (e.g. Form 89, which could hardly have been made on a simple wheel) were made by a process the reverse of that described above: namely, wheel-throwing *over* a mould of convex shape. This would mean that the pot was made upside-down, but would have the advantage that a high foot could be added on top as part of the same operation. The feet of these dishes, it may be noted, do not show a tendency to break away from the body when they are smashed, as one might expect had the feet been made separately and luted on. The rough exterior surfaces often found show that these at least were wheel-formed. A mould, it may be added, could have borne decorative motifs in low relief which would have been transferred on to the pot as it was made. This could explain the rather unusual appearance of much of the 'stamped' decoration of Style E, which often seems too shallow and indistinct to have been impressed directly. Whether the series of small bowls of sixth-century date were made in a similar manner is an open question. The method of application of the slip on these vessels is also uncertain.

FIRING

African Red Slip Ware must have been fired in open kilns under well-controlled oxydizing conditions, for examples are invariably a clear red or similar colour, except when accidentally burnt subsequently. Preliminary trials indicate a normal firing temperature in the region of 1000°C or rather below,[1] but further investigation of this is necessary.

DECORATION

Several punches used to impress stamps similar to those on Red Slip Ware are known from North Africa. Two have been published with illustrations, one from

[1] By the kind permission of Miss M. Farnsworth, a number of sherds of African R.S. Ware and Late Roman C were refired to a temperature of 1000°C in an electric kiln at Corinth (property of the American School of Classical Studies, Athens). The refired African R.S. pieces have a rather overfired appearance (deep brownish-red clay, with rather dull slip; cf. ware of Forms 62A and 68). A normal example of Late Roman C remained unchanged, but a poorly fired example darkened in colour. The sample sherds are in the British School of Archaeology, Athens.

Sidi Aïch in Tunisia,[1] the other from Tiddis (near Constantine).[2] Both are small (about 1½ and 3½ cm. long respectively), and were made to be held between thumb and forefinger. They are of clay, and bear a motif at each end. The Sidi Aïch example bears a stemmed palm-branch and a sort of fringed circle motif; that from Tiddis has a dart-shaped palm-branch and a 'filled square'). Neither pair corresponds exactly with any stamp-type in the main R.S. Ware series; the former shows certain similarities with Style B, while the latter is not far removed from Style C. The Tiddis stamp in addition bears a freehand signature on two sides.[3] Several punches were also found at Uthina, but these are not illustrated or described,[4] and I have not seen them. These are presumably of late fifth- or early sixth-century date, like the other finds from the site. Similar punches may have been used for the rest of the African stamped series, with the possible exception of some dishes of Style E (see above). The use of double-ended punches clearly made for faster production, since in many cases all the stamps on a vessel could be executed with a single tool. Appliqué decoration was presumably executed with the aid of similar punches, though these must on the whole have been larger and more like standard moulds. Some form of die must also have been used to fashion the punched knobs found on Form 72B, etc.

The other techniques used for decoration need no special comment. Only the 'feather-rouletting' on Forms 82–84 is at all unusual; this appears to have been transferred on to the vessels from moulds (see discussion above), which explains the shallow and blurred appearance of the rouletting in many cases.

PRODUCTION CENTRES

The exact locations of the factories which made R.S. Ware remain unknown, with one exception (Oudna), but in spite of certain theories current in the past it can now be stated with a fair degree of certainty that the main centres all lay within the bounds of present-day Tunisia. Waagé argues conclusively for a North African source for the ware.[5] More recent discoveries have only served to strengthen his views, and to allow us to pinpoint more accurately the centres involved in its production.

The principal reasons for assigning the whole series to factories in Tunisia and nowhere else may be summarized as follows:

(1) Examples of the various categories of African Red Slip Ware, wherever they are found, are so consistent in fabric and details of form that it is hard to believe that they could have been made in more than one region. Lamboglia's argument that his 't.s. chiara D' and Waagé's 'Late Roman B' are different wares fails for this reason;[6] the pieces from Western sites known to me are identical in appearance to those from the East.

(2) Lamboglia's original indication of a northern Mediterranean (Italian or S. Gaulish) origin for the ware on account of its frequency on sites such as Venti-

[1] Cagnat, *BAC*, 1888, p. 473.

[2] *Libyca* vi (1958) 260–1.

[3] XOVICINꝺ/FЄLICI*d* (i.e. 'ex officina Felicis').

[4] P. Gauckler, *Mon. Piot* iii (1896) 215, n. 1.

[5] *Antioch* iv.i 45–47.

[6] Lamboglia (1963) 145. At a previous stage L. considered 't.s. chiara C' and 'Late A' to be different wares, but he now recognizes that they are the same (*loc. cit.*).

miglia may now be discounted; the ware is admittedly very common in Italy, but no more so than on sites throughout North Africa. Moreover, it cannot be said to have had any predecessors in these regions, where the various *terra sigillata* wares were the standard fine wares in early Imperial times.[1] The same argument holds for the pieces from Višići in Dalmatia, which Čremošnik at one stage believed to be of local origin.[2]

(3) The earliest R.S. Ware forms (e.g. Forms 2, 3A) are best represented in North Africa,[3] in the collections from Tunisia and on sites such as Carthage and Tipasa. One may note that the earlier phases of the ware in general are poorly represented in the East, thereby ruling out the likelihood of an Egyptian source for the series, as was proposed by Kübler and Wace.

(4) The closed forms in the series have been found in far greater quantities on Tunisian sites than anywhere else.[4] As it appears to have been generally the case that closed vessels were not so freely exported as open shapes, on account of their relative bulkiness, one may assume that this gives a fair guide as to where they were made.

(5) Several local variants of the ware may be distinguished in North Africa (see below, pp. 300–9). These show us the *milieu* from which the export wares emerged.

(6) The mottoes appearing on examples of Forms 171 and 172 (see Catalogue above) have been shown by Salomonson in his 1960 article to refer to the schools of *venatores* flourishing in the province of Africa in the third century. These are referred to on a number of mosaics from the region, especially from el-Djem.

(7) Against an Egyptian origin for Forms 56 and 82–84, of which examples seem to be particularly numerous on Egyptian sites, one may note Form 56, series g, with its personifications of the provinces of Africa and Mauretania(?), and also the forms of the cross-monogram stamps, which normally display the closed form of the *rho* current in the West.[5] Examples of these forms have been found in greater numbers on North African sites in recent years, invalidating Wace's theory of an Egyptian origin.

Having established the North African (and specifically Tunisian) origin of R.S. Ware as a whole, we must now attempt to pinpoint the location of the individual factories within this region. The evidence for this rests largely on the distribution patterns of the various classes of the ware within the region, for in only one case is the actual site of a factory known.

Central Tunisia—the area around el-Djem—would seem to have been the home of the finer ('Late Roman A') varieties of the ware. A heavy concentration of the closed vessels with appliqués Forms 171–179 occurs in this area, particularly at el-Djem and el-Aouja, and, as has just been noted, some of these bear inscriptions relating to local events. These surely must have been produced in the immediate vicinity, though the actual factories have yet to be found. The main 'Late Roman

[1] Waagé makes this point (*Antioch* iv.i 47).

[2] Čremošnik (1962) 137.

[3] As indicated by Waagé (1948) 46; see MAP A1.

[4] See MAP B22; cf. Waagé, *loc. cit.*

[5] For discussion of the 'Eastern' and 'Western' forms of the cross-monogram, see M. A. Frantz, *AJA* xxxiii (1929) 10–26. The 'Eastern' type with the open-ended *rho* is found on Late Roman C Ware.

A' series is especially common at Raqqada,[1] suggesting a source in the same region; also numerous there are the small bowls Forms 43–44 and the larger bowls Form 45. The occurrence of numerous examples of Form 52 on the sites just mentioned seems to provide evidence of local manufacture in the case of the later examples of this fabric. Presumably the fifth-century Forms 82–84 were also made in the same region, though this remains hypothetical. The factories for all of these products can hardly have been situated further inland, for the wares made at Henchir es-Srira (see below) were different, and did not command the same export market; if anything, they will have been closer to the coast.

The coarser versions of the ware ('Late B', t.s. chiara 'A', 'D') were probably made elsewhere, perhaps in the north, in the region of Carthage. The distribution of the earlier varieties (which had few local competitors) gives little clue as to their source, both open and closed forms being fairly evenly distributed over the whole of Tunisia. However, the relative infrequency of such wares in the Sbeitla region and at Raqqada (where local variants are present) may be significant. In the case of the series of fourth–fifth century dishes with Style A stamped decoration a markedly northern distribution-pattern emerges; these occur regularly along the north coast of Tunisia and Algeria, but are relatively uncommon in south-central Tunisia and the inland regions, where the other versions of the ware appear more regularly (see MAPS A 7–10). At a later date, concrete evidence is provided by the Oudna potters' workshops, which produced stamped wares of Style E (i) (mainly bowls of Forms 96–97 and 99; see Catalogue). The various sixth-century stamped wares seem to be particularly common at Carthage, so there may have been other production centres in the region at that time. The general similarities in fabric between these late wares and the early series of R.S. Ware make it very probable that these too were made in the same area.

The fabric represented by Forms 62A, 68, etc. stands apart from both of the above series, being common in the southern parts of Tunisia. It is more or less the standard fine ware at La Skhira, and constitutes the main non-local ware in the Sbeitla region. Like the 'Late A' varieties, it is widely distributed along the inland routes to the west; it also appears in large quantities on the Tripolitanian sites, and is exported to the East. However, it scarcely occurs on Western Mediterranean sites. Such a distribution-pattern suggests a South Tunisian source, with exports channelled through the southern ports; one can only assume that the dominant northern factories barred the way to exportation to the north. The products of the Sidi Aïch potteries have close affinities with this group. The factories may tentatively be placed in the coastal region between Sfax and Gabès; they can hardly have been much further south, on account of the presence of yet another red-slip ware in this area ('Tripolitanian Red Slip Ware'; see below).

A further Central Tunisian group seems represented by the semi-coarse series Forms 181–5; Salomonson has recovered possible evidence for their manufacture at Pheradi Maius and Ksour es-Saf.[2]

In short, it seems that three main groups may be distinguished, all produced within the confines of present-day Tunisia. They might conveniently be termed

[1] Salomonson (1968) 113–20; some 70 examples of the dishes Forms 48–50.

[2] Noted by Carandini, *Ostia* i (1969) 45–46. I have seen the pieces in question.

North, Central and *South Tunisian* (after the manner of the Gaulish wares). The main factories would seem to have been within easy distance of the sea, which explains their enormous export trade in comparison with the purely local distribution of other similar wares made in the regions further inland. These latter wares must now be briefly considered.

III

OTHER AFRICAN WARES

SEVERAL other versions of R.S. Ware with a local distribution only can be distinguished among the finds from North African sites. Most of these are similar in quality and appearance to the main series, but owing to geographical factors and the like they did not achieve the same widespread popularity. They seem to be mostly of third- to fifth-century date.

Best known at present are the products of the kilns at Henchir es-Srira in west-central Tunisia and Sidi Aïch further south, which are the subject of a recent article by Stern.[1] The Henchir es-Srira fabric is similar to that of Form 62B above, of finely granular texture with a thin finely smoothed slip, but differs in that it has a complete slip-coating. The standard vessel-forms are dishes and plates related to Forms 48(?), 50 and 62, a variant of Form 60 with a hooked grooved rim, and bowls with rims similar to Form 45C. Bases are mostly flat, but low triangular feet (cf. Form 45) are also present (from bowls?). Stamped decoration is rare; one of the few examples is shown on FIG. 59a.[2] The Henchir es-Srira workshops may be classed as offshoots of the Central Tunisian factories; to judge by their products they were active during the late third and fourth centuries. They seem to have catered for a purely local market; a single fragment in Athens is the only sign of exportation.[3]

The Sidi Aïch products, in contrast, have more in common with my South Tunisian series. The clay is fairly clean-breaking, with lime inclusions, and is completely or partly covered with a smooth slip. The common vessel-forms are flat-bottomed dishes with curved walls and chamfered or flat-topped rims; low feet are normal. A cruder version of Form 68 and shallow dishes with multiple rouletting on the outside (perhaps copies of Forms 82–84) also occur. Stamped decoration of fourth- to fifth-century type (cf. Styles A–C above) is present, together with some fish-motifs.[4] The series probably runs from late in the fourth century until the latter part of the fifth. A bowl found at Germa (FIG. 59b)[5] and some pieces from the region of Gemellae on the African *limes*[6] may indicate that this ware had a fairly wide distribution within North Africa.

[1] E. M. Stern, *BABesch* xliii (1968) 146–54. Prof. J. W. Salomonson and the author kindly permitted me to examine (in Rome) the material included in this article. For earlier investigations at H. es-Srira, see *BAC*, 1905, clxvi–clxviii, and L. Hautecœur, *MEFR* xxix (1909) 383–94. The Sidi Aïch potteries were first noted by Cagnat (*BAC*, 1888, 473–4).

[2] Tunis, Bardo (from old excavations); *Cat. Alaoui* (1910) 312, no. 668. Bowl base with low triangular foot. For other stamped pieces, see Stern (1968) pl. I.

[3] Athens Agora P 27125.

[4] Stern (1968) pl. I.

[5] Sebha, H 92. Form related to Form 68.

[6] Kindly shown to me by Lady Brogan.

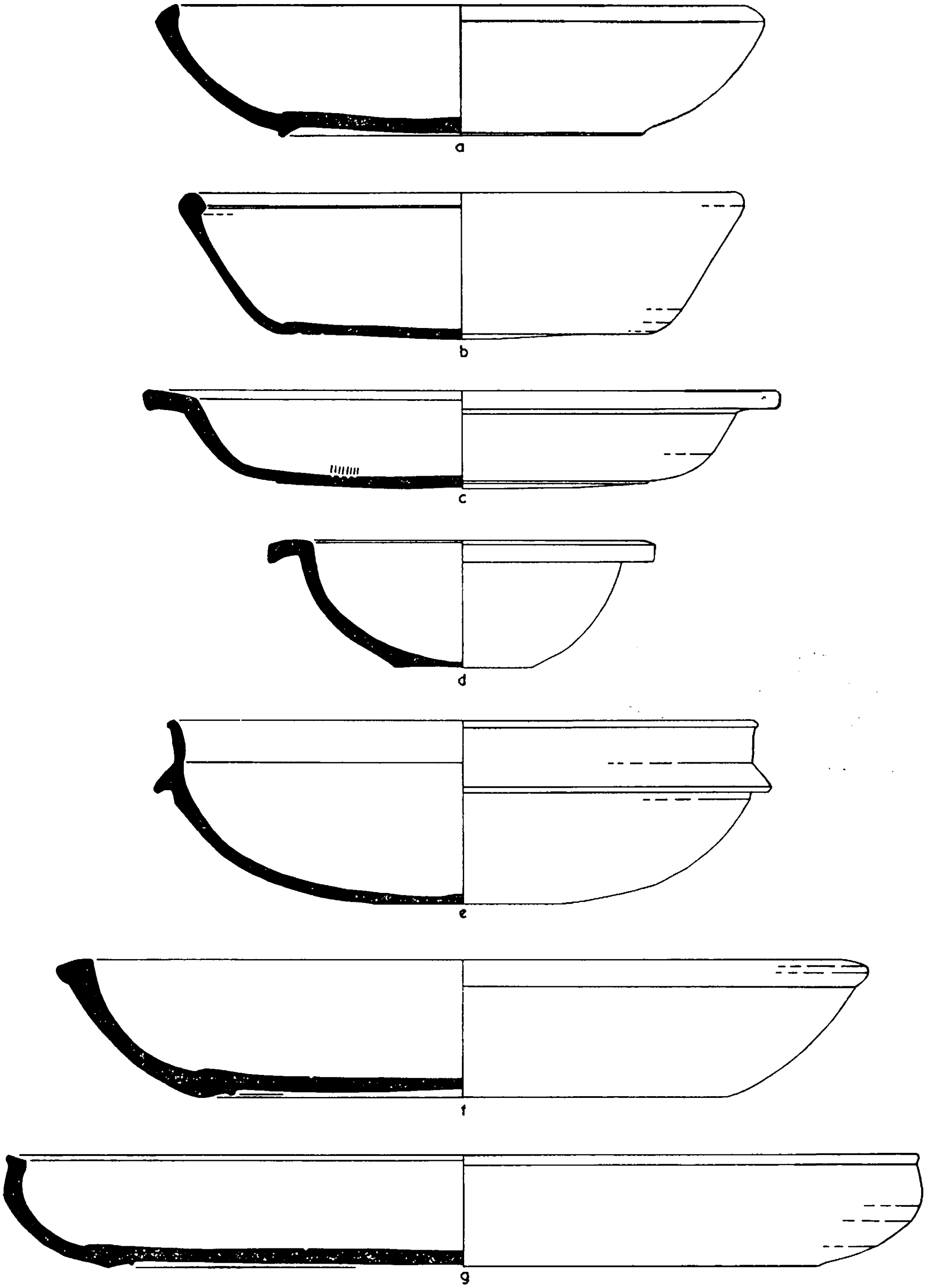


FIG. 58 Scale 2 : 5

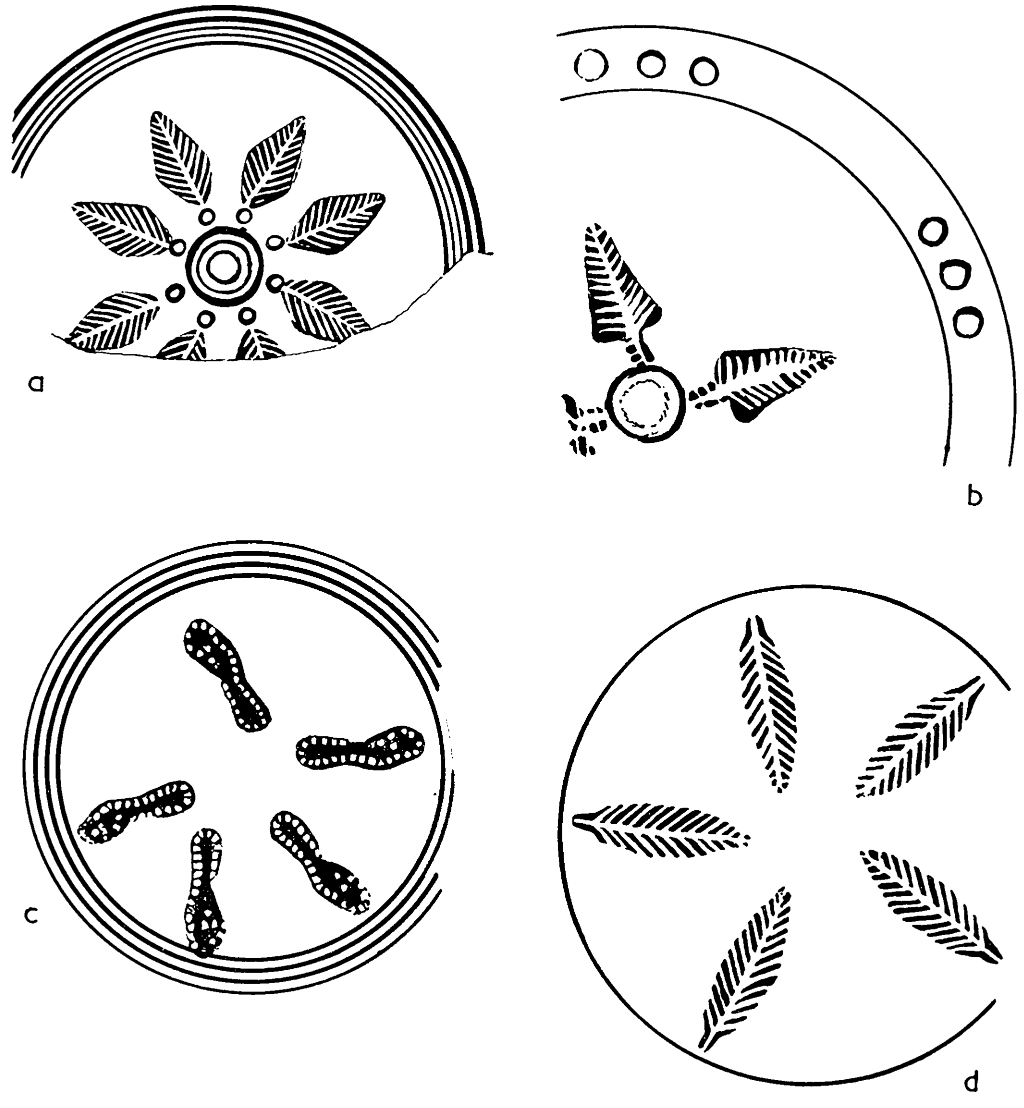


FIG. 59 Scale 2 : 3

Another red-slipped ware is common on sites in the Sbeitla region,[1] and occurs also at Thelepte, Kasserine and Haidra.[2] This fabric is of a more granular texture, comparable with the main 'Late B' series, with a partial slip-coating. The ware is often hard-fired, with a purplish tinge; a distinctive feature is the careful smoothing of the unslipped areas. The commonest vessel-type is a deep dish similar to that common at Sidi Aïch; two examples are shown on FIG. 58a–b.[3] Another common form is a flat-rimmed bowl as Form 78, illustrated here by an example from Kasserine (FIG. 58d).[4] This type seems to have had a wide market; examples occur on the Tripolitanian sites. Less common are stamped dishes as FIG. 58c;[5] the decoration on this piece, shown on FIG. 59c, has parallels in the Tripolitanian series discussed below (cf. FIG. 62). A series of closed vessels of late types from Haidra (now in the Louvre) seem to be of the same ware. On the basis of all these we may postulate a major producing centre somewhere in western Tunisia, active in the fourth and fifth centuries.

A further variety of R.S. Ware may be isolated in central Algeria. This fabric, classed by Février as a variant of 'T.S. chiara D', is the normal fine ware in fourth- to fifth-century contexts at Sétif.[6] Its exact source is uncertain. The three standard vessel-types are:

- A a mortarium with a heavy drooping flange (Février (1965) fig. 32.2, etc.; Février (1963) 130, fig. 5).
- B a shallow dish with a chamfered rim and a tiny foot (Février (1965) fig. 32.8, 10, etc.).
- C a deep flat-bottomed dish with an incurved or internally thickened rim (Février (1965) fig. 27 bottom, 21, fig. 33.16, etc.; Février (1963) 131, figs. 7–8).

None of these correspond to standard R.S. Ware types; the dish-type C, however, is very similar to West Tunisian and Sidi Aïch products (see above). The same types recur at Djemila (Allais (1957) 37 ff., types II, IV), and perhaps also at Mila (see J. Lassus, *Libyca* iv (1956) pls. I–II for some similar shapes). A few pieces have stamped decoration. An earlier version of this ware appears to be present in a rather fine smooth-surfaced ware with a metallic slip, of which examples have been found both at Sétif and at Djemila.[7]

Red-slipped wares seem also to have been produced at Tiddis (near Constantine), where potters' workshops have been uncovered;[8] the exact relationship of these to the wares just mentioned is not certain. The discovery of a punch (see pp. 295–6 above) makes it clear that stamped wares were included among the products of the factory. A fourth- to fifth-century date seems likely.

Finally, a number of vessels of otherwise unrecorded types from North African sites in various European collections indicate the presence of further varieties of R.S. Ware. Some examples are shown on FIGS. 58e–g, 59d. These presumably

[1] Surface finds from the Brathay Expedition (1962 and 1966). The pieces are mostly in Belfast.

[2] Various examples in the Louvre.

[3] a: Louvre CA 2823, from Thelepte; b: CA 2822, from Haidra.

[4] Louvre CA 2832.

[5] Louvre CA 2825.

[6] P. Février, *Fouilles de Sétif* (1965) *passim;* Février (1963) 129–32.

[7] Février (1965) 141, fig. 36, GH 7–8.4, nos. 11–22, etc.; Février (1963) 128–9, figs. 2–3; Allais (1957) 37, Type I.

[8] *BAC*, 1954, 182; *Libyca* vi (1958) 260–3.

represent the products of minor potteries which served a limited local market. A flanged mortarium from Sbeitla,[1] in the local fabric, is also of note as a possible forerunner of R.S. Ware Form 91.

TRIPOLITANIAN RED SLIP WARE

To be classed together with the above is a fine version of R.S. Ware found in abundance on sites in Tripolitania. I propose to call it 'Tripolitanian Red Slip Ware', for, whether made there or not, it is typical of the region. Though generally ignored to date, it deserves detailed consideration.

The ware in question is extremely common at Lepcis Magna and Sabratha, particularly in the surface levels; in the Serapeum excavations at Lepcis it accounted for some two-thirds of all the fine ware found.[2] It is also well attested at Tripoli, Ghirza to the south,[3] and on sites in the Fezzan. The limits of its distribution in South Tunisia are not known to me; it may well be that the ware was made here rather than in Tripolitania, for the sandy soils of the Tripoli region seem hardly suitable for the production of such fine vessels. Occasional pieces have been found in western Cyrenaica,[4] and on one or two Sicilian and South Italian sites,[5] along with the related lamp series (see pp. 314–15).

The typical body-clay is fine-grained, generally orange, orange-red or pinkish-red, with a thin smooth slip of similar colour all over. The slip, unlike that of normal R.S. Ware, usually has a slight metallic lustre. The overall appearance is very similar to that of poorly fired *Late Roman C* ware. Breaks are normally clean and sharp, though when poorly fired the clay tends to be flaky. Impurities in the clay are few and small: a few small brownish particles, which sometimes cause scratches on the exterior, sometimes a little fine mica, very rarely a trace of lime. Interiors are generally very carefully smoothed, while exteriors exhibit turning-marks or the like. Undersides are roughly finished, with prominent turning-marks; in some cases they bear close-set grooves. Fine brush-marks appear on the undersides of hooked rims. It would seem very likely that the majority of examples were thrown in moulds (cf. remarks above on R.S. Ware, where similar features are noted). The firing is fairly regular, though small black spots are sometimes present; a yellowish tinge is not infrequent.

Only open shapes—dishes and bowls—can be reconstructed, though a few fragments of closed forms occur (see Type Series below). Most show connections with African R.S. Ware forms of the fourth and fifth centuries. The dishes are mostly of flat-based varieties; a distinctive feature is the hollowing-out of the base to leave a narrow resting-surface round the edge. Other shapes have feet of varying heights. Rouletted decoration is fairly common, often appearing on the hanging lips of dishes and bowls. Stamped decoration would seem to be rather uncommon; some of the few examples known to me appear on FIG. 62. The stamps themselves

[1] Preliminary publication in *Brathay Exploration Group: Annual Report for 1962* 74, fig. 11.1. The piece is now in Belfast (Queen's University).

[2] Excavations of Prof. A. di Vita (publication forthcoming).

[3] See monograph by Dr. D. J. Smith (forthcoming).

[4] At Tika and Tocra (unpublished).

[5] E.g. at Francolise (Campania).

are clearly related to the main R.S. Ware series (Style A, etc.); the motifs include debased palms (FIG. 62 a–b; see under Forms 3, 4C below), and *planta pedis* (FIG. 62 c–d; see Forms 4A, 6 (base)). Fine multiple grooving is found on the floors of some specimens, in some cases in association with stamps.

The dating-evidence for the ware is best considered as a whole, in view of the general lack of pieces from closely datable contexts. Several of the main forms are adaptations of African R.S. Ware forms of the fourth and fifth centuries. In the upper levels of the Serapeum at Lepcis both series occur alongside each other; a predominantly late fourth- to mid fifth-century date is indicated by the African R.S. pieces. The same pattern is found elsewhere in Tripolitania and the Fezzan, though no good closed deposits are available to give precise datings. Three undecorated dishes of Forms 2 and 3 (see below) were found at Germa in tombs adjacent to the one which produced the African R.S. dishes Form 59.1 and Form 61.1 above; there is good reason to believe that they are of roughly similar date (i.e. *c.* 300–350). These may be among the earlier pieces in the sequence. The stamped vessels noted above are probably later; comparison with other African pieces suggests a date in the first half of the fifth century. I suspect that Form 1 (a shape not influenced by other African wares) may be very early; only two fragments of this form occurred in the Serapeum at Lepcis, which could indicate that they were survival-pieces. A rough date for the beginning of the series may be provided by a dish from Barrafranca in Sicily, found in association with a coin of Claudius II (268–70) (see Type Series below). For the other end of the series there is only stylistic evidence to go on; this suggests a terminal date in the late fifth century—a period when the Tripolitanian cities themselves were in decline.

Type Series

FORM 1

Large carinated bowl with upright rouletted rim.

Type-specimen (drawn):
Ghirza Gh/C1/1.[1] D. 28·6.

Similar: Sherds from Tocra and Lepcis (Serapeum C 51–52).

FORM 2

Dish with flat base, sloping wall and short flat rim; undecorated. Cf. African R.S. Form 58. Common.

Type-specimen:
Istanbul 5380, from Sabratha. D. 29·8.

Similar: *Libya Antiqua* iii–iv (1966–67) 125–6, fig. 12, C 53 (from Bu Ngem; D. 28·4). Sebha H 24 and H 26, from Germa, Royal Tomb 3 (ref. *ibid.* 215; both D. 27·0).
Also frs. from Lepcis (Serapeum C 42) and Ghirza (no. 17).

[1] See forthcoming publication for this and other numbers cited below.

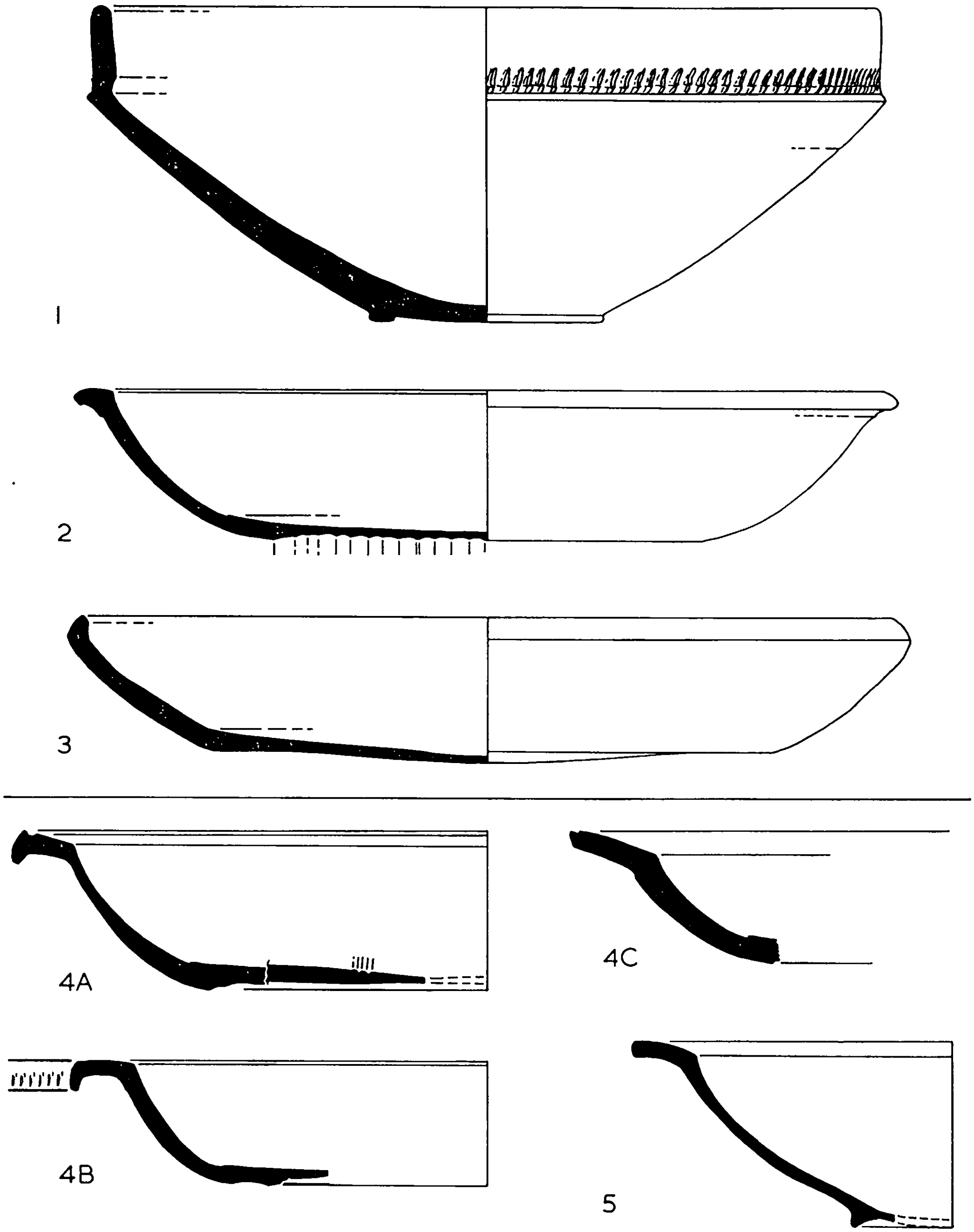


FIG. 60 Scale 2:5

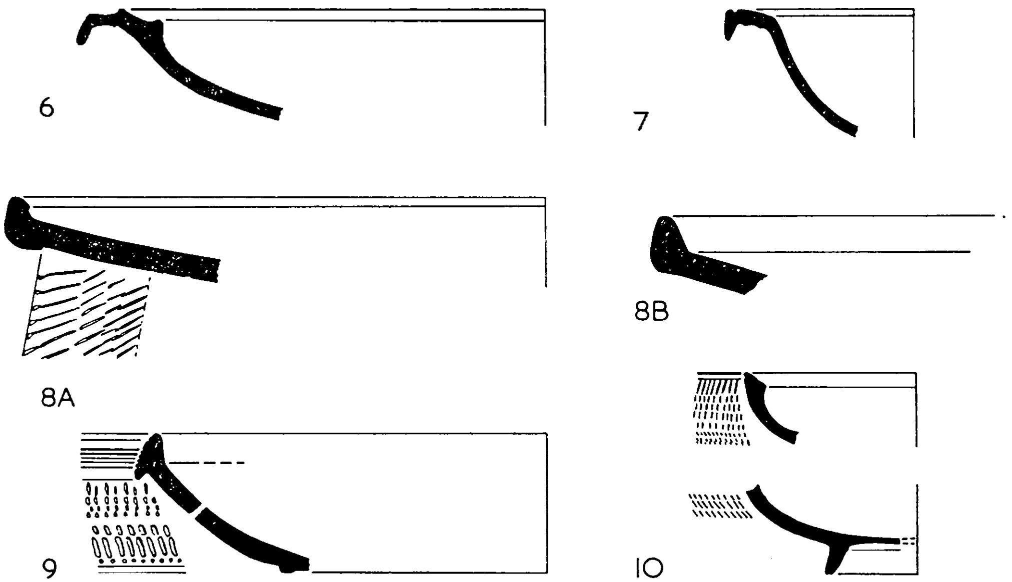


FIG. 61 Scale 2 : 5

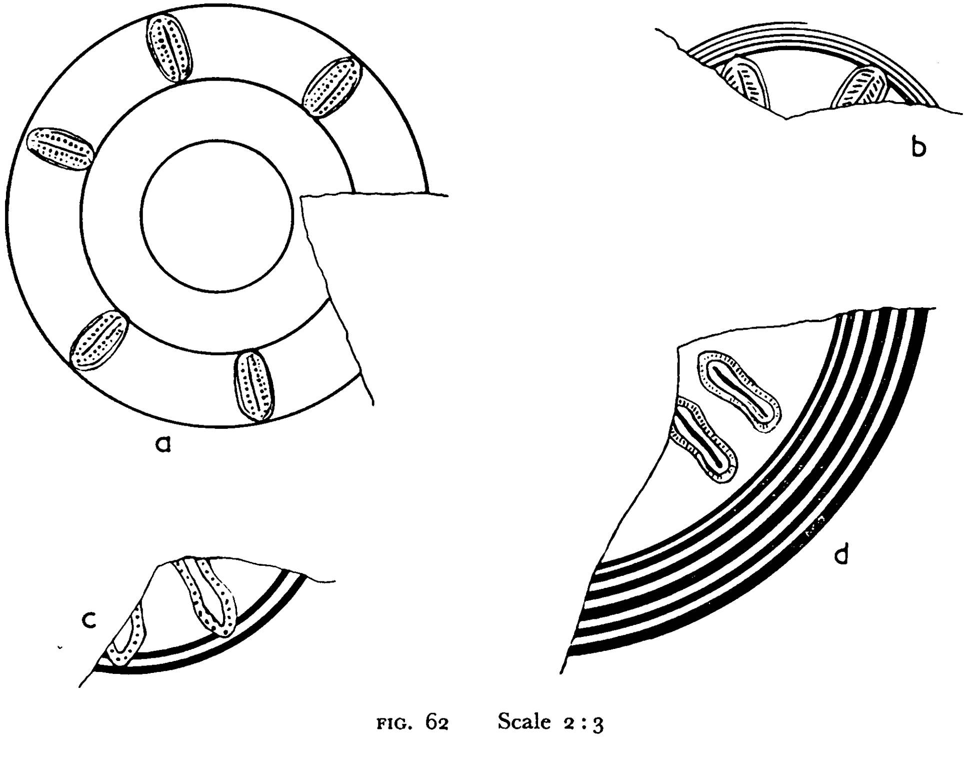


FIG. 62 Scale 2 : 3

FORM 3

Dish with flat base, flaring wall and thickened rim, bevelled or rounded on outside, sometimes slightly incurved. Cf. African R.S. Form 61. Common.

Type-specimen:

British Museum, Egyptian Dept. 5258 (findspot unknown). D. (rim) 29·5.

Similar: Sebha H 28, from Germa, Royal Tomb 4 (D. 24·0); frs. from Lepcis (Serapeum C 40–41) and Ghirza (nos. 10–12, 26–28, etc.).

Variant with low foot: Tripoli Mus., uncat. D. rim 26·0. Four grooves round centre of floor. Early?

Variant with heavy knobbed rim: Sebha H 93, from Germa. Fragmentary, D. *c.* 34; stamped decoration (FIG. 62 b).[1]

FORM 4

Dish with flat base, sloping wall and broad flat rim. Cf. African R.S. Form 65. Common. Three versions: A, with hooked lip, grooved on top; B, with hanging lip, sometimes rouletted on outside; C, with plain lip, grooved on top.

Type-specimens:

A Lepcis, Serapeum C 45. Fragmentary. Est. max. D. *c.* 34·2. Stamped foot motifs on floor (FIG. 62 c).

B Lepcis, Serapeum C 44. Fr.; est. D. 30.

C Ghirza (no. 5). Fr.; est. D. 36.

Similar: Type A and similar: *Libya Antiqua* iii–iv (1966–67) 126, fig. 12, C 54 (from Bu Ngem); *ibid.* (Arabic section) fig. 2 on p. 33, b (from Tajura).

Type C: Sebha H 37, from Germa. D. *c.* 35·5. Stamped decoration (FIG. 62 a). Frs. of Types A–C at Lepcis and Ghirza.

FORM 5

Bowl with sloping wall, broad flat rim and low foot. Uncommon.

Type-specimen:

Lepcis, Serapeum C 43. Fr.; est. D. 23·0.

FORM 6

Shallow bowl with broad hooked rim, 'stepped' on top. No complete profiles preserved; bases with low 'double' feet very probably belong to this Form. Apparently related to African R.S. Forms 67–68.

Type-specimen:

Lepcis, Serapeum C 38. Fr.; est. D. at lip 31·5.

Similar: frs. from Ghirza (nos. 19, 32?) and Lepcis.

Variant: Lepcis, Serapeum C 39. Fr.; est. D. 36. Deeper form (cf. Form 5), with shorter 'stepped' rim, slightly hooked and rouletted on outside.

Base: Lepcis, Serapeum C 66. Stamped decoration (FIG. 62 d).

[1] Similar stamps: *Libya Antiqua* iii–iv (1966–67) 130, C 77, pl. XXXII f (fr. from Bu Ngem).

FORM 7

Small bowl with broad flat rim with hanging lip, grooved on top. Cf. African R.S. Form 52. Not common.

Type-specimen:

Lepcis, Serapeum C 54. Fr.; est. D. 12·5. Misfired creamy white.

FORM 8

Plate with heavy upturned rim. Frs. only; form of base uncertain. Perhaps related to African R.S. Form 82. Two versions: A, with knobbed rim, rounded on underside; B, with tapering vertical rim, more or less triangular.

Type-specimens:

A Ghirza (no. 34). Fr.; est. D. 36. Multiple rouletting on underside.
B Tocra (1965 excavations). Fr.; est. D. 35.

Similar: fr. from Ghirza (no. 13).

FORM 9

Dish with low foot, sloping wall and vertical hooked rim; rouletting on wall, grooves on rim. A copy of African R.S. Form 84. Rare.

Type-specimen:

Tocra (1965 excavations). Est. D. *c.* 26·5. Two frs., probably from same vessel, giving profile.

FORM 10

Small bowl with flat-topped rim, rounded wall and fairly high foot; rouletting over most of exterior. Cf. African R.S. Form 85. Uncommon.

Type-specimens:

Ghirza (nos. 36, 22). Rim and base frs., from different vessels, giving profile. Est.D. of rim fr. 11·6.

OTHER FORMS

A large dish from Barrafranca in Sicily may also belong to this series.[1] This has a shallow sloping floor, tapering upright rim and high thick foot; the floor is decorated with groups of grooves. A base fr. with similar features (in Tripolitanian R.S. Ware) is present among the Ghirza finds (no. 47). A few frs. of other forms and some sherds of closed forms also occur; none, however, give a restorable profile.

For the lamp series which accompanies this ware, see pp. 314–15.

[1] *NSc* 1956, 167, fig. 2 b. It is listed as 't.s. chiara', but corresponds to no known type in the main African series.

IV

AFRICAN LAMPS

A LARGE group of lamps, long since recognized by various authors as being of North African manufacture, are identical in fabric with African R.S. Ware and merit a brief discussion here. They constitute one of the most distinctive and widespread classes of Late Roman lamps, and numerous examples have been published. Several hundred examples found at Carthage are listed by Delattre;[1] there are other large collections of them in various North African museums,[2] and in the British Museum,[3] Leiden,[4] Mainz,[5] and various other European collections (mainly from sites in North Africa). Further specimens may be found in local museums all round the Mediterranean. A fairly comprehensive bibliography is given by Menzel (1954) 90–93 *passim*. There can be little doubt that the series was produced in Tunisia; Carthage has supplied by far the largest number of known examples from any one site.[6] Previous classifications: Broneer[7] type XXXI (best examples), Brants[8] type XXIX, Iványi[9] type XII, Ponsich[10] type IVC.

The North African series comprises two distinct types, both of which may be further subdivided. These have not generally been clearly differentiated by the various writers on the subject. All are mould-made; some of the original moulds, which seem mostly to have been made of plaster, are preserved.[11]

Type I

Ovoid, with large discus, narrow sloping rim and short, generally tapering channel on top linking discus and nozzle. Base flat or slightly hollowed, normally bearing grooves, which form a decorative pattern below handle. One or two filling-holes on discus. Relief decoration on discus, simple relief or impressed pattern on rim. Two varieties may be distinguished on the basis of the handle-type: (A) with mould-made pierced handle; (B) with stump-handle on top, with deep central groove and somewhat pinched sides. Ware of both fairly fine-grained (as that of R.S. Ware Forms 56 and 62B or slightly coarser), with slip on outside.

[1] A. L. Delattre, 'Lampes chrétiennes de Carthage', *RAC* xl (1890) 134–9, xli (1891) 39–51, 296–309, xlii (1892) 133–4, 224–9, xliii (1893) 34–40.

[2] E.g. in Sabratha and Tripoli (unpublished).

[3] Dalton (1901) 137–47, nos. 713–803, pl. XXXII top l. and r.

[4] Brants (1913) 65–67, nos. 1146–77 (and perhaps 1137–45), pl. VIII.

[5] Menzel (1954) 90–94, nos. 594–620.

[6] An Egyptian or Cyrenaican source for the series has been proposed by some (see Menzel (1954) 90; Perlzweig (1961) 9), but this may be rejected. Egypt at this period produced lamps of a very different kind (the so-called 'toad lamps'), whose fabric bears no resemblance to the series under discussion, and relatively few examples of the North African types have been found in Cyrenaica.

[7] O. Broneer, *Corinth* iv.2, *Terracotta Lamps* (Cambridge, Mass., 1930) 118 ff.

[8] See note 4 above.

[9] Iványi (1935) 14–15, 105–7.

[10] Ponsich (1961) 36, 107–9, pls. XXVII–XXVIII.

[11] L. Hautecœur, *MEFR* xxix (1909) 384 (Henchir es-Srira; also noted in *BAC*, 1905, clxviii); P. Gauckler, *Mon. Piot* iii (1896) 215, n. 1, and *id.*, *BAC*, 1897, 454–5 (Oudna).

Examples:[1]

Delattre (1890–3) *passim;* Broneer (1930) nos. 1451–2, pl. XXI; Iványi (1935) pls. XXXIX, XL 1–2, 5, XLVI 8; Menzel (1954) figs. 72.1, 79.1–3, 6, 80.3, 86.5; Ponsich (1961) nos. 361–3, 367–8, 370–1, 375, 380, 389, 391; etc.

Lamps of this type were produced at Henchir es-Srira,[2] though the finer examples probably come from elsewhere.

TYPE II Broneer type XXXI, Brants type XXIX

Flat-topped, with circular discus and broad rim, separated by a ridge. Long nozzle, with broad straight channel on top connecting with discus. Plain stump-handle, projecting behind body. Low base-ring, connected by a ridge to handle; often two grooves or a small motif on underside. Usually two filling-holes on discus. Elaborate relief decoration on discus and rim. A broad division into two varieties is possible, though the distinction is not clear-cut:

A in fine-grained ware with thin smooth slip (as that of Forms 82–84 above); decoration neat and sharp.
B in poorer thicker fabric with thicker slip (cf. Forms 103–104); less sharply articulated, with rather blurred decoration.

Examples:

Delattre, *passim*; Dalton (1901) pl. XXXII top l. and r.; Brants (1913) pl. VIII; Broneer (1930) nos. 1453–4, fig. 202, pl. XXII; Iványi (1935) pls. XL 3, 4, 6, XLVI 11, 13, 16; Menzel (1954) figs. 75.5, 77 (except 10, 13), 78.1, 86.2; Perlzweig (1961) nos. 323–6, 328–32, pl. 10; Ponsich (1961) nos. 364–5, 369, 372–4, 376–7, 382–3; etc.

Several variants of the above types occur. Some combine elements of both types,[3] others have a continuous rim cutting off the channel from the discus,[4] and a few have features such as a square discus.[5] Some large versions with elaborate handles and, in some cases, double nozzles also occur.[6] None are particularly common.

DECORATION

The motifs employed on Type I have little in common with the pottery series. The rim normally bears a pair of palm-motifs or herringbones, either in relief or impressed; rows of simple oblique strokes and rinceau-patterns are also fairly common. On the discus the commonest motif is the *Chi-Rho* monogram,[7] of which several varieties are found; also popular are large rosettes[8] and various kinds

[1] For bibliography, see notes 1–10 opposite.
[2] See *BAC*, 1905, clxvii, and Hautecœur, *art. cit.* 386 ff., where descriptions are given.
[3] E.g. Ponsich (1961) nos. 366, 378.
[4] Menzel (1954) no. 605, fig. 77.10; Perlzweig (1961) no. 327, pl. 10.
[5] E.g. Ponsich (1961) no. 379.
[6] E.g. Delattre (1891) nos. 499, 510; *id.* (1892) 224–5; Perlzweig (1961) no. 322, pl. 10.
[7] E.g. Delattre (1891) nos. 425–31; Menzel (1954) fig. 79.1–3.
[8] E.g. Delattre (1891) nos. 347–8, 352, 356, 358 ff.; Iványi (1935) pls. XXXIX 8, XL 1.

of running animals.[1] Other less common motifs include a palm-tree,[2] a tragic mask,[3] a male bust,[4] and the Jewish seven-branched candlestick.[5]

Type IIA, on the other hand, has close links with the main R.S. Ware series. Many of the small rim-motifs are shared with Style D in the stamped series, the only difference being that here they are rendered in relief. This, together with close similarity in fabric, shows clearly that they were made in the same centres as the fine-ware dishes of Forms 56 and 82–84. A number of the same motifs also occur on Type IIB, and they were widely copied by other lamp-makers of the period. Geometric and floral motifs predominate; the following stamp types are attested on the series (cf. Catalogue above): 27, 28, 67, 87, 100, 102, 103, 105, 106, 110, 111, 118, 120, 130. To these may be added a number of others: various decorated square patterns, elaborated S-scrolls, small palm-trees, quatrefoils with double outlines (common on Type IIB) and the like. A few animal subjects (dolphins, doves, birds resembling Types 187–8)[6] and one or two cross motifs are also found; one lamp type bears a series of coin-impressions (see below).

The discus-motifs on Type IIA have connections with both the later relief-decorated series and the stamps of Style D. Various kinds of wild animals and fish, rendered in the manner of those on Forms 52B and 56, are common; a few *venatores* also occur.[7] Biblical scenes similar to those already noted on the relief ware are also present.[8] A second very common series comprises cross-monograms with dotted decoration, relief versions of those common in Style D (Type 289 ff.),[9] and some similarly decorated *Chi-Rho* motifs (cf. Types 287–8).[10] Other motifs include large geometric interlock patterns with dotted decoration as on Style D,[11] various birds, some with similar decoration,[12] canthari,[13] and a series of male and female busts, often surrounded by wreaths, some of which may depict Imperial figures.[14]

On Type IIB the rim-motifs are mostly derivatives of those found on Type IIA. One of the commonest discus-motifs is a large cross (sometimes a cross-monogram) with elaborate jewelled decoration,[15] similar to the stamped crosses of Style E.

[1] E.g. Ivânyi (1935) pl. XXXIX 1–6.

[2] *Ibid.* pl. XXXIX 9; cf. Delattre (1891) nos. 312–3, 319; Dalton (1901) nos. 756–7. A similar motif occurs on Type II: cf. Delattre no. 314 ff.

[3]. Walters, *BMCat. Greek & Roman Lamps* (1914) no. 1355.

[4] E.g. Ivânyi (1935) pl. XXXIX 7.

[5] *Ibid.* pl. XL 5; cf. Delattre (1891) no. 412 ff.

[6] E.g. Delattre (1890) nos. 3, 27, 96, (1892) no. 675, and Dalton (1901) no. 718, pl. XXXII (dolphins); Broneer (1930) no. 1454, pl. XXII (birds); Delattre (1891) no. 493, and (1892) nos. 743, 746, etc. (doves).

[7] Delattre (1892) no. 743 ff.; Dalton (1901) no. 719; Perlzweig (1961) no. 325, pl. 10.

[8] E.g. the Jonah scenes, Delattre (1892) no. 675, and Dalton (1901) no. 718; Abraham's Sacrifice, Delattre (1892) no. 665. A list of Biblical scenes is given by Delattre (1892) nos. 661–80; some of the identifications are open to question.

[9] E.g. Dalton (1901) nos. 771–81; Menzel (1954) fig. 77.10; Perlzweig (1961) no. 327, pl. 10.

[10] E.g. Delattre (1891) nos. 446, 458, etc.; Dalton (1901) nos. 758–9, 765–6, 768, etc.; Menzel (1954) fig. 77.11, 14.

[11] E.g. Dalton (1901) no. 797; Broneer (1930) no. 1453; Menzel (1954) fig. 77.8; Perlzweig (1961) no. 328, pl. 10.

[12] For various kinds, see Delattre (1891) no. 202 ff.; also Broneer (1930) no. 1454, pl. XXII. Many of these are probably to be classed as Type IIB.

[13] Delattre (1891) no. 381 ff.

[14] E.g. Delattre (1892) no. 702; Dalton (1901) no. 714, pl. XXXII; Menzel (1954) fig. 77.3; Perlzweig (1961) no. 323, pl. 10.

[15] Typical examples are Menzel (1954) figs. 77.9, 78.1; Vermaseren and Van Essen (1965) pl. CLXXXIX.2. For related cross-monograms see Delattre (1891) no. 499; Vermaseren and Van Essen (1965) pl. CXX.4. Numerous elaborately decorated types are listed by Delattre (1891), pp. 301–8 *passim*.

Many of the animal motifs (especially the series of doves and eagles[1]), and a number of figures which appear to represent Christ[2] would appear to belong here also; further parallels with Style E may be observed among these. Other pieces bear motifs more or less identical with those found on Type IIA, but more poorly executed;[3] these are presumably of earlier date. Type IIB is particularly common at Carthage, and may have been produced there; many of Delattre's pieces fall into this category. It seems not to have been so widely exported as the finer version.

DATING

Relatively little external dating-evidence is available for the series, but the connections with the R.S. Ware stamped series noted above allow us to arrive at an approximate date-range for each type. These tend to indicate that Type II, in particular, has in the past often been dated a good deal too early.

The date-range of Type I is far from certain, but it is clear that this is the earlier type. The not infrequent occurrence of examples with pierced handles (Type IA) probably indicates a beginning fairly early in the fourth century, if not earlier, for comparable fourth-century lamps from other sources generally have solid handles.[4] A fragment of Type IB is present in one of the late fourth-century groups in the Athenian Agora; the Pannonian examples published by Iványi are presumably of similar date (i.e. not later than *c.* 400–410). Another example was found at Ragusa (Sicily) in association with a coin of 317–320;[5] here finds of Type IIA in adjacent tombs suggest a slight overlap between the two types. Type I would thus appear to span most of the fourth century and the early years of the fifth.

One piece of incontrovertible evidence exists for the dating of Type II. A small group of lamps of Type IIA,[6] with dotted cross-monograms (cf. Types 291–3) on the discus, bear on the rim a series of coin-impressions, showing obverse and reverse types alternately. These are sufficiently clear to permit identification of the coin used for the purpose as one of the gold issues commemorating the *vicennalia* of Theodosius II in 430.[7] A firm *terminus post quem* is therefore provided for the lamps, which were presumably made not many years later (though this cannot, of course, be fully proved). They are probably to be placed among the earliest examples of Type II, though the series with wild animals, fish and Biblical scenes, to judge by their stylistic connections, must have begun equally early. It seems unlikely that any lamps of this type were made before 400, for neither they nor imitations of them are present in the fourth-century groups from the Athenian Agora and elsewhere.

[1] See Delattre (1891) nos. 201–59.

[2] Delattre (1892) no. 690 ff.; Dalton (1901) no. 721. The commonest type represents Christ trampling on a serpent; cf. R.S. Ware Type 238.

[3] E.g. Delattre (1891) nos. 446, 451, with dotted cross-monograms; a duplicate in Toronto (926.50.5) has the typical fabric of Type IIB.

[4] At Athens, the pierced type of handle seems to have disappeared by about A.D. 300; the same may also be true in Italy.

[5] *NSc*, 1967, 412, fig. 5 b. The date of the group may be as late as the early fifth century.

[6] E. le Blant, *MEFR* vi (1886) 230, pl. II, 1; A. L. Delattre, 'Un fragment de lampe chrétienne', *BAC*, 1897, 287–9; *Il R. Museo Archeologico di Aquileia* 26, fig. 73; *Bull. soc. ant. France*, 1937, 176–8, with fig.=Rolland (1951) 174–5 (from St. Blaise).

[7] D. of impressions 1·5 cm.; taken from a half-*solidus* (or a *triens*?). Obv.: helmeted bust of Emperor, frontal, with spear diagonally behind shoulder at r. DN THEODO SIVS P [F AVG]. Rev.: Victory walking l., bearing long cross. VOT XX MVLT XXX A.

However, the presence of a few pieces along with R.S. Ware Forms 52B, 53A, etc. in a group from the S. Prisca Mithraeum in Rome[1] may indicate that the type was already in production in the early decades of the fifth century. Most of the rim-motifs on Type IIA may be paralleled on R.S. Ware of about the second and third quarters of the fifth century,[2] and few examples of the type have been found in dated groups of this period; the cross-motifs suggest that it continued to be made until around the end of the century. Type IIA is thus more or less contemporaneous with the dish series Forms 82–84, and probably to be dated *c.* 420–500+. The best parallels for the elaborate crosses on Type IIB date from around the second quarter of the sixth century (cf. Types 328–9); this coarser version may therefore have lasted from some time in the second half of the fifth century until about 550. Imitations continued to be made for some time after this.

'TRIPOLITANIAN' LAMPS
(Brants type XXIV)

A parallel series of lamps, closely related to Tripolitanian R.S. Ware, may also be distinguished. It spans much the same period as the pottery series; the two are regularly found in association with each other. Its main characteristics are a rather large flat-topped form with a broad rim, stump-handle and small tapering nozzle, and relief decoration of a rather slight character, consisting mainly of rows of dots or small oblique strokes, stylized leaf-sprays, and roundels containing groups of dots. The clay is fine, and tends towards a more brownish tinge than on the pottery counterparts. A pronounced ridge, often flanked by rows of strokes, normally separates the discus from the rim; generally both parts bear some form of decoration. The underside is plain, with a simple rounded base. Two basic types are present: I, with a circular discus, normally small and slightly concave; II, with a small discus and a narrow channel flanked by ridges from discus to nozzle (cf. R.S. Ware Type II).[3] Of these, the former seems to span the fourth and fifth centuries,[4] while the latter should date from the fifth century only.[5] A fairly long overlap between the two types may be postulated, for the decorative schemes on both are largely similar. Early versions of Type I (with a rather abnormal decorative scheme) occur in early to mid fourth-century contexts in Malta[6] and at Germa.[7]

[1] Vermaseren and Van Essen (1965) 360–1, nos. 213–15, pl. LXXXVI.1–3, from deposit in room Y.

[2] For typical examples, see Menzel (1954) fig. 77.1–5.

[3] For typical examples, see Brants (1913) 59, pl. VII, nos. 1062–70 (both types); *Libya Antiqua* iii–iv (1966–67), Arabic section, fig. 4 on p. 39, a–b (Type I), and fig. 5 on p. 41, a (Type II).

[4] This is the predominant type at the Serapeum in Lepcis Magna (mainly late fourth to mid fifth century; see p. 305 above). Examples occur in association with Type I lamps of the main series at Ragusa in Sicily (*NSc* 1967, 411, fig. 4 f, and p. 412, fig. 5 a), and also with Type IIA lamps at Vassallaggi (*FA* xvi (1961) no. 2247, pl. X, 37).

[5] For examples found in association with lamps of Type IIA of the main series, see *NSc* 1967, 412, figs. 5 c, 6 a. The type is relatively rare in the Lepcis group.

[6] Qrendi (1913), in Nat. Mus., Valletta; found in the same tomb as R.S. Ware Form 57.3 and 6.

[7] Royal Tomb no. 5 (dug by Mr. C. M. Daniels); cf. also Caputo, *Mon. ant.* xli (1951) 296, nos. 1–2. Also at Ghirza (publication forthcoming).

'Tripolitanian' lamps are common throughout Tripolitania and the Fezzan (though not in Tunisia), and also in Malta and parts of Sicily.[1] A few examples have been found in Alexandria.[2] A typical piece, published by Menzel, is claimed to be from Miletus.[3]

[1] Numerous examples in the Tripoli and Sabratha museums (unpublished); others from Ghirza, Germa, etc. Malta: many examples in the Rabat Museum (unpublished). Sicily: see notes 4–5 opposite.

[2] E. Breccia, *Le musée gréco-romain au cours de l'année 1922–23* (Alexandria, 1924) 31, nos. 49–51, pl. XXVIII 4–6.

[3] Menzel (1954) no. 556, fig. 80.13.

V

ÇANDARLI WARE

DURING the latter part of the second century and the third century the most serious competitor to African R.S. Ware on the Mediterranean market at large was the red-gloss ware known as *Çandarli Ware*, a product of the Pergamon region. This belongs to the class of Eastern Sigillata wares; it represents the continuation in Roman times of the series of Hellenistic black- and red-gloss and relief wares discussed by Schäfer in *Hellenistische Keramik aus Pergamon.*[1] It corresponds to *Eastern Sigillata C* in Kenyon's classification.[2]

The ware was first isolated as a result of Loeschcke's trial excavations in 1911 at Çandarlı, the ancient Pitane, near Pergamon in Asia Minor.[3] The excavations produced evidence for the manufacture on the spot of a fine red-gloss ware in the form of wasters and kiln-fittings—the only instance to date in the East where such a factory has been located. Among the material found, Loeschcke was able to distinguish (partly on stratigraphical evidence) an early and a late group, which, by means of the associated finds, he was able to date to the period of Tiberius and the second century A.D. respectively. More recent finds in Pergamon itself, published by Schäfer,[4] have amplified our knowledge of the first-century products of the industry.

It must not, however, be thought that Çandarli ware came to an end in the second century, as did the other Eastern Sigillata wares. New evidence shows that the factories remained in production until the end of the third century, if not later. It is these later products, the contemporaries of the earlier African wares, which are our main concern here. For their possible connections with the later *Late Roman C* ware, see below, p. 369.

The distinguishing mark of the Çandarli fabric is the occasional appearance in the clay of large flakes of golden mica. The ware is otherwise often virtually identical in appearance to late pieces of Italian sigillata, though the Çandarli products are rather thicker-walled and can be distinguished by their low heavy feet and lack of decoration. As noted by Loeschcke, two fabrics may be distinguished. The products of the first century are characterized by a fine-grained orange body with a lustrous orange or orange-red gloss, generally thicker on the inside than on the outside, and often omitted under the base. In the second century and later the ware approximates more closely to that of Italian and Gaulish sigillata: it is almost always hard-fired, generally red-brown, maroon or even purplish in colour, with (on the inside, at any rate) a good gloss of a similar shade. The interior of these late products is normally finely smoothed and given a thick gloss surface, highly resistant

[1] J. Schäfer, *Hellenistische Keramik aus Pergamon* 64–100, pls. 22–40.

[2] K. M. Kenyon, in *Samaria-Sebaste* iii 282–3.

[3] S. Loeschcke, 'Sigillata-Töpfereien in Tschandarli', *Ath. Mitt.* xxxvii (1912) 344–407. Some of the finds are now in the Römisch-germanisches Zentralmuseum, Mainz.

[4] J. Schäfer, 'Terra Sigillata aus Pergamon', *Arch. Anz.* 1962, 777–802, *passim.*

to wear; the exterior, on the other hand, tends to be poorly finished, with numerous scratches from the final tooling, and its gloss coating is thin and lacking in lustre. On occasions the gloss contains quantities of fine silvery mica. Not infrequently the marks of three small pad-like kiln-supports[1] are visible on the floor or the resting-surface of the foot. Decoration is kept to a minimum.

The earlier vessel-forms have been described and illustrated in Loeschcke's and Schäfer's articles, and in any case lie outside the scope of the present work. I shall not attempt to reclassify them here—Loeschcke's type series is adequate for purposes of reference—but propose to append a 'late series' to embrace those forms which are not covered by either of the authors mentioned. These forms are few, since from about the middle of the second century onwards the Çandarli factories concentrated on the production of a few simple shapes only, which were manufactured in very large quantities and with no more than minor changes for the next century and a half, if not longer. During this period only one new shape (Form 4, together with its rare counterpart Form 5) was introduced; the rest are merely developments of forms already in existence by the end of the first century.

The date of the end of production is none too clear. In general, Çandarli ware seems to disappear from the scene around the middle of the third century, its place being taken by African Red Slip Ware: in the Athenian Agora, for instance, it is only poorly represented in the destruction material of A.D. 267. However, it seems to have continued in use until considerably later in the Pergamon region itself. In a deposit at Mytilene,[2] dated on coin-evidence to *c.* 320–340,[3] fragments of all the standard forms are present in considerable numbers, together with a few pieces of African ware of early fourth-century types.[4] Though many of the former are probably survival-pieces, the relative paucity of African Red Slip Ware suggests that Çandarli ware was still the predominant fine ware in this region in the early fourth century. To this may be added the probability of a direct connection with the later Late Roman C ware (discussed below, p. 369). Çandarli ware would seem, then, to have continued to be made until some time in the fourth century, though in its later phases it was probably supplying a local market only.

During the second half of the second century and the first half of the third, Çandarli ware was widely exported over an area stretching from South Russia in the north to Cyrenaica in the south; examples are particularly common on Aegean sites, where, after the disappearance of the last of the other *sigillata* wares (around A.D. 150), it met with no serious competition until the introduction of the fine versions of the African wares around the middle of the third century. Çandarli ware is the standard fine ware during this period at places such as Mytilene, Samos (Heraion),[5] Knossos, Athens and Saloniki, to judge by the finds from these sites, and is fairly common on other Greek mainland sites of this period. It is probable that it was equally common in Cyrenaica, though the evidence at present is rather scanty. In the Black Sea region it appears to have played a secondary role to the local 'Pontic'

[1] For these see Loeschcke, *op. cit.* 355 ff., fig. 4; also Waagé (1933) 289, and fig. 1, nos. 90, 93.

[2] Excavated by S. Charitonidis (1960–61); for a brief note of the find see *PAE*, 1961, 209–10.

[3] The latest associated coin appears to be an issue of Constantine I.

[4] Forms 58A(?)–B, 59.

[5] Finds from old excavations.

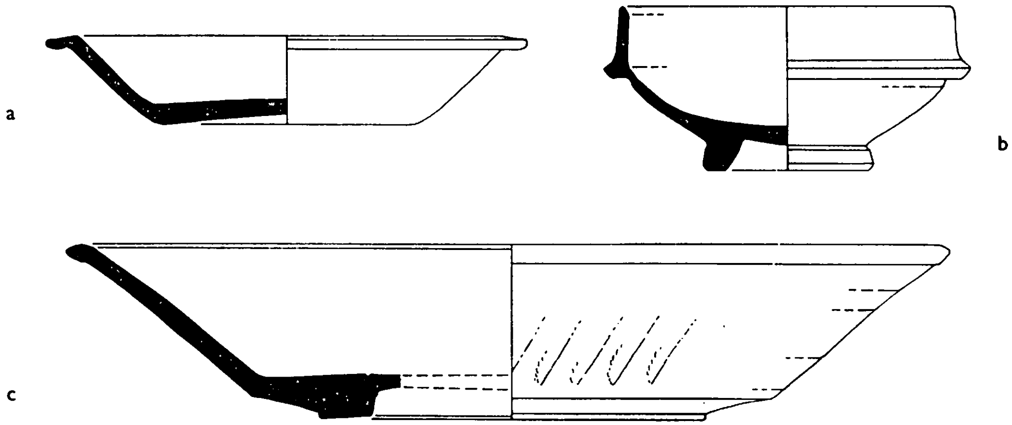


FIG. 63 Common forms, *c.* A.D. 100–150 Scale 2 : 5
a, b—Athens Agora c—Sparta (old excavations)

products.[1] This export pattern is largely similar to that of the earlier products of the Pergamon region (the earlier Çandarli products and the relief wares of Hellenistic times),[2] though these were exported in much smaller quantities. It also corresponds largely to that of the later *Late Roman C* ware, with the major difference that this had also a large market in the East. Only sporadic specimens of the later Çandarli ware are reported from this area: one fr. from the Antioch excavations,[3] two dishes of Form 4 from Samaria (see lists below). Rare examples have also been found in Italy; I have seen pieces from Ostia[4] and Cosa.[5]

CATALOGUE OF VESSEL TYPES[6]

An asterisk indicates that the profile is drawn in a Figure

FORM 1

Bowl or basin with straight wall, flaring at about 45°, heavy angular rim and low heavy foot. Apparently the successor of the deep flat-rimmed basin Loeschcke type 29, and a deep counterpart of the dishes of Form 2 below. Examples **1–3** below appear to represent three successive stages in its development, spanning the period mid second to mid third century. The early examples are deep, with a high steep wall and a short flat rim, slightly concave or offset from the wall on the underside; these derive directly from Loeschcke type 29. Later ones have a more open flaring form with a shorter squarish rim. A gradual reduction in size seems to accompany these changes; the large size of pieces such as **1** is matched on their predecessor.

[1] For these, see Knipovich (1929) 22 ff., classes C, D, E, *passim*, pls. I–II, Types 15, 18, 24, 26, 21A, 24A, etc.; Knipovich (1952) *passim*, excluding those types listed below as Çandarli products.

[2] For the distribution of these, see provenances noted by Courby, *Les vases grecs à reliefs* 451 ff., and by Schäfer, *Hellenistische Keramik aus Pergamon* 85 ff.

[3] Waagé (1948) 42, pl. VII, RM 1.

[4] *Ostia* i (1969) 36, no. 26 (fr. of Form 4).

[5] From the excavations of the American Academy in Rome, kindly shown to me by Prof. F. E. Brown; frs. of Form 1, etc.

[6] For previous classifications referred to below, see Loeschcke (1912) and Knipovich (1952).

For size-range, see pieces listed below; most examples of the form have a diameter in the range 30–37 cm. Not as common as Forms 2–4.

Examples:

*1 Athens Agora P 25219. D. 41·5, H. 17·6.
Similar: Knossos (1959 excavations).[1] Est. D. 33; fragmentary.

2 Ilyrat (S. Russia); *Materiali* 85, pp. 296–7, type 29, fig. 11. D. 25, H. *c.* 7·4. Form close to **3**; rim more like **1**.

*3 Athens Agora P 19189; *Hesperia* xviii (1949) 217, pl. 41.2 (middle of second row). D. 22·2, H. 7·6.

The context of **1** (from a well-group) indicates a mid–late second-century date, as also does that of the Knossos parallel cited. The Ilyrat example **2** comes from a context with a coin of Commodus(?) and is dated by Silantyeva to the third century. A date *c.* 200–250 seems likely. **3** comes from a Herulian floor-deposit of A.D. 267.

FORM 2

Knipovich type 17(M) = 18(T)

Dish, medium-sized or small, with shallow flaring wall and plain or thickened rim, and a low heavy foot as on Form 1, often hollowed out on the inside. Late version of Loeschcke type 26 (the Çandarli version of Dragendorff form 18). The type current in the earlier part of the second century (Loeschcke 26b, FIG. 63c) is fairly large (D. close to 30 cm.), with a fairly high wall bearing a small rim-moulding, and often a groove on the floor. Examples **1–3** indicate the development of Form 2 proper; by about Severan times the standard version is small and shallow, with a shallow flaring wall ending in a plain rim. The later pieces are mostly poorly made. Normal size: in the second century D. about 20–25 cm.; late examples mostly *c.* 18–20 cm.

Examples:

1 Athens Agora P 21522. Est. D. 21·2, H. 4·7. Double rim-moulding. Similar, but with flattened rim (variant): Conze, *Altertümer von Pergamon* I, 2, pp. 268–9, no. 5. D. 24, H. 5.

2 Leiden I 1922/4 30, from a collection in Izmir; Holwerda no. 394, pl. III. D. 18·5–19·2, H. 4·7. Medium wall-angle, plain thickened rim.
Similar, fragmentary (all about same size): Knipovich (1952) 304–5, fig. 5.2 (type 17(M)); Pergamon, Asklepieion 1837 (from Musalla Mezarlik);[2] Argos (French excavations, code E6GC). Svilengrad (Bulgaria); *Bull. inst. arch. bulg.* xi (1937) 163, fig. 156.1 (D. 24, H. *c.* 5·5).

*3 Athens Agora P 5750. D. 18·2, H. 4·2. Flaring wall. Similar: several examples from Knossos (old excavations, Villa Dionysus, and recent series of excavations).[3]

Cf. also Waagé (1933) 289, pl. IX, nos. 91–94.

[1] Publication forthcoming.

[2] For the location of this site, and remarks on the excavations, see E. Boehringer, in *Neue deutsche Ausgrabungen im Mittelmeergebiet und im vorderen Orient* (D. Arch. Inst., Berlin, 1959) 126–7, and Beil. 1.

[3] Publication forthcoming.

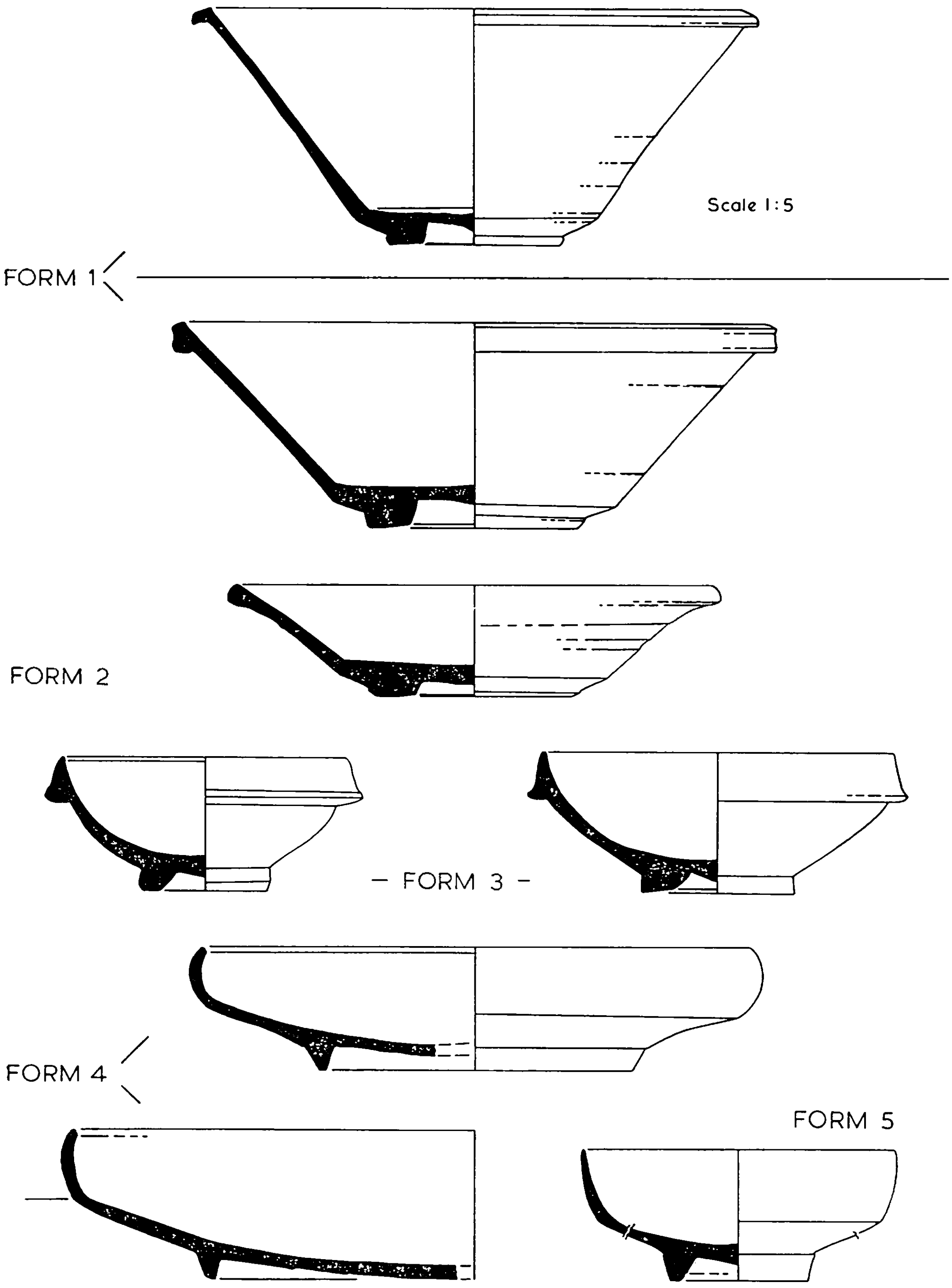


FIG. 64 Late forms, type series Scale 2 : 5

Example **1** appears to be mid second century. The Svilengrad piece was found in a grave together with a coin of Commodus (176–92 ±). Pieces as **3** are common in contexts of about Severan date at Knossos, together with examples of Forms 3 and 4; the Agora piece would also appear to be of this date (or possibly late second century). There is as yet no convincing evidence that the form was made any later.

FORM 3

Knipovich type 13(M) = 14(T)

Hemispherical flanged bowl with low heavy foot. A continuation of Loeschcke type 19, but with a lower more splayed rim, tending to merge with the flange. Earlier versions (see FIG. 63b) have a higher vertical rim and sometimes a thinnish foot; these copy directly an Italian T.S. shape (Dragendorff form 6). Common in mid second- to mid third-century contexts; no obvious development during this period.

Size-range: D. 6·5–22 cm., mostly in range 10–13 cm.

Examples:

*1 Athens Agora P 2005. D. 10·6.

*2 Athens Agora P 18418. D. 13·0.

Similar: Knipovich (1952) 303, fig. 3.4–5 (Type 13(M)); also *Materiali* 25, p. 173, fig. 72 (from Mirmeki); *Mat. şi cerc. arh.* iv (1957) 29, fig. 12 (from Istros); Volos Mus. K 1268 (from Goritsa; unpublished); perhaps also *Arch. Pamatki* xi (1962) 68–69, pl. III, 1 (from Olbia region). Pergamon, Asklepieion: several fragmentary catalogued examples (from Musalla Mezarlik).

Cf. also Waagé (1933) 290, pl. IX, nos. 95–97.

The Agora pieces listed are from late second–early third-century contexts; others are variously dated second or third century. Often found together with Forms 2 and 4.

FORM 4

Dish, medium-sized or large, with shallow curving floor, incurved wall and triangular tapering foot. Normally a slight angle on outside where wall and floor meet. The foot is of fairly wide diameter; it is usually chamfered on the outside and vertical on the inner face; those of larger pieces tend to be heavier and more square-cut. Sometimes a groove on the floor. The fabric generally contains some silvery mica (not the normal gold variety); the gloss is mostly rather dull and the exterior poorly finished. No very clear development; examples **2–3** represent the normal type. **1** is unusual and may be early. A possible link with the earlier form Loeschcke 6 is provided by **4**.

Size-range: D. 17–38 (fairly evenly spread).

Examples:

1 Leiden I 1922/4 31, from a collection in Izmir; Holwerda no. 395, pl. III. D. rim 18·6. Groove on floor. Good ware with gold mica. Low triangular foot. Similar form: Knossos, old excavations ('1937/4'). D. rim est. 22. Fragmentary, poorer ware. Pergamon, Asklepieion 1791. As preceding.

*2 Palatiano (Macedonia);[1] *Makedonika* ix (1969) 181, fig. 17.5. Est. rim D. 20·2. Fragmentary. Higher foot, no floor groove.
Similar: Pergamon, Asklepieion: several fragmentary catalogued examples from the site and from Musalla Mezarlik. Also: *Materiali* 85, p. 301, type 44, fig. 15.1 (from Ilyrat).

*3 Corinth C-34-2316. Est. D. 29·5. Fragmentary. Large version, with heavier foot; no floor groove.
Similar: *Samaria-Sebaste* iii fig. 83.11.[2] D. *c.* 37·5. Silvery mica in clay.
Lemnos Mus. (uncat.). Est. D. *c.* 29·6. Fragmentary.
Pergamon, Asklepieion 1805, from Musalla Mezarlik. D. 24·0. Fragmentary.

Predecessor?

4 Xanthos, Letoon 30. D. rim est. 34·8, foot est. 23. Fragmentary. Low angular foot; low upright wall, sloping slightly outwards. Mica mostly silvery; good gloss.

Basically a third-century form; perhaps influenced by African Red Slip Ware Form 27, though more likely a derivative of the first-century Çandarli form Loeschcke 6. Common in groups of about Severan date at Knossos and elsewhere, together with late pieces of Form 2 and Form 3. The form is not present in early–mid second-century groups, and would appear not to have become popular until the end of the century, if not later. It occurs in the late group at Mytilene (see above), but possibly only as survival material. Examples **1** and **4** are probably earlier than the main series; no precise dates are available for them.[3]

FORM 5

Small bowl with upright wall, the counterpart of the dish Form 4. Rare.

Example:

*1 Palatiano (Macedonia); *Makedonika* ix (1969) 181, fig. 17.7. Est. D. *c.* 11·5. Fragmentary; profile restored. Poor finish.

The context of this piece suggests a date around the first half of the third century. Cf. Form 4.2 above, from the same site.

[1] Excavations of Ph. Petsas; for brief report see *Arch. Delt.* xxii (1967) B 2, 400–3.

[2] Excavation no. Q 922. A second more fragmentary example (no. Q 923) is similar (est. D. 38). Both are in the Palestine Arch. Museum, Jerusalem, where I have examined them.

[3] **1** might conceivably form a group with Form 2.2; **4** may provide a link with the first-century form Loeschcke 6.

VI

'LATE ROMAN C' WARE

THE main competitor to the African wares in the East, from the fourth century onwards, is that termed by Waagé *Late Roman C* ware.[1] It appears to have been made in Asia Minor, and has possible links with the earlier Çandarli ware (see discussion below, p. 369). Like the African ware, it belongs to the class of fine red-slip wares rather than that of the red-gloss *terra sigillata*. It is relatively easily distinguished on the basis of fabric from all the African wares except that which I have termed Tripolitanian Red Slip Ware (which, fortunately, rarely occurs on the same sites). The range of shapes is small and distinctive; some of the forms have a long life and show a degree of development unparalleled in the African ware. The main kinds of decoration are rouletting and stamps, the latter a borrowing from African R.S. Ware.

Late Roman C is common throughout the Eastern Mediterranean in the fifth to seventh centuries, occurring somewhat earlier in Asia Minor and the surrounding regions. Its exact region of origin remains unknown; until this can be established I prefer to retain Waagé's nomenclature, even though new names are proposed in this book for his other wares.[2]

FABRIC AND TECHNIQUES OF MANUFACTURE

The ware is uniform wherever it is found, and with the exception of a small group noted on p. 336 must have been produced at a single centre. It is also remarkably consistent throughout its long history, without the variations that are found in the African wares. The clay is a fine-grained red, not unlike that of the finer African products, but having a different range of impurities. A large number of small lime particles are frequently (but not always) present in it, producing in the case of the darker, harder-fired examples a distinctive fine-speckled appearance; mica, on the other hand, is rare—hardly ever more than a few specks—and other impurities are absent. The ware is generally hard-fired, with a brownish-red, purplish-red or maroon tint, and breaks cleanly without splintering. The red slip, which covers the whole surface, is generally no more than a fine film, which fuses with the body-clay; sometimes, however, it is more thickly applied on interiors. It is merely a refined version of the body-clay, dull or occasionally slightly metallic in appearance, with none of the gloss of the *terra sigillata* wares.

[1] Waagé (1933) 298 ff.; *id.* (1948) 51–52.

[2] The alternative names proposed by Robinson (1959, p. 60, n. 9) strike me as too vague to be really practicable. A classification on a regional basis, such as is in use for Romano-British and Gaulish wares, is more appealing as a long-term aim; until this can be achieved, an anonymous classification of the 'A' 'B' 'C' type, such as that devised by Kenyon for the Eastern Sigillata wares, seems preferable.

The interior surfaces of most *Late Roman C* products appear to have been carefully smoothed with some kind of spatula, the traces of which may often be seen in the form of a series of broad faintly concave bands around the floor. On late pieces (particularly Form 10) the smoothing was, however, done mostly with a brush, producing a series of minute corrugations which give the surface the feel of fine sandpaper. The exteriors, below the rim, bear smoothing-marks similar to those on the insides, but in addition display numerous small scratches, apparently caused by lime particles being dragged round the surface during manufacture. This difference in surface texture seems to me to indicate the use of moulds in the manufacturing process.[1]

Two other features may confirm this. The wall-thickness of many pieces is not uniform, but much thinner halfway up than at the rim or the base, a feature not shared with the other Late Roman wares and one contributing to the fragility of this ware. Also, the exterior rim-surfaces do not show the same marks as the rest of the outside, but are often (particularly on late vessels) rather irregular in profile, indicating the presence here of the potter's hand. This would suggest that the rim was added on top of a mould-thrown body, which explains the curious small offset present at the junction of the two. The exteriors of these vessels, one may note, are never decorated below rim-level.

Late Roman C is generally hard-fired. The normal red-brown or purplish-red colour of the ware indicates a firing temperature rather higher than that normal for the African wares, and probably somewhat in excess of 1000°C.[2] Softer pieces, with an orange or orange-red tint, occur less frequently, mostly in the earlier phases of the ware. The firing was generally even, producing a uniform colour throughout, with the exception of the outer rim-surface. This area is more often than not discoloured and subject to partial reduction, producing a sepia, black or creamy-white result, and, in severe cases, some flaking of the surface. This irregularity seems to point to a practice of firing the pots in stacks, one directly on top of another, with only this part of their rims exposed to the gases circulating in the kiln. It is unlikely that they were fired in their moulds (which might produce the same effect), and there is no evidence in the form of sagger-marks or the like that they were arranged in any other way.

The rouletted decoration common on this ware during the fifth and early sixth centuries is mostly applied with a multiple implement with two, three or four sets of teeth capable of producing a whole band of decoration at once. Sets of parallel overlapping strokes are visible in some cases where the full circle has been completed. This labour-saving device appears not to have been used outside Asia Minor.[3] Multiple grooves, in contrast, generally consist of one continuous spiral. Stamped decoration, where combined with these, can be seen to have been added at a later stage during manufacture.

[1] For similar features in African R.S. Ware, see p. 294 above.

[2] See p. 295 n. 1 above.

[3] The only other instances of such multiple rouletting occur on the light-coloured ware described below on pp. 408–10.

CATALOGUE OF VESSEL TYPES

An asterisk indicates that the profile is drawn in a Figure

FORM I

Antioch 965, 967.

Dish with vertical curved rim, shallow curved floor, and foot of varying height, often tapering; cf. Çandarli ware, late series, Form 4. No stamped decoration. Large and small sizes. Four types:

A with vertical rim, fairly high, tending to curve inwards at lip; tapering foot of medium height, chamfered on exterior; slight carination between rim and underside. Undecorated.

B with similar or rather lower rim; low foot of normal type (see Form 2 ff.). Undecorated.

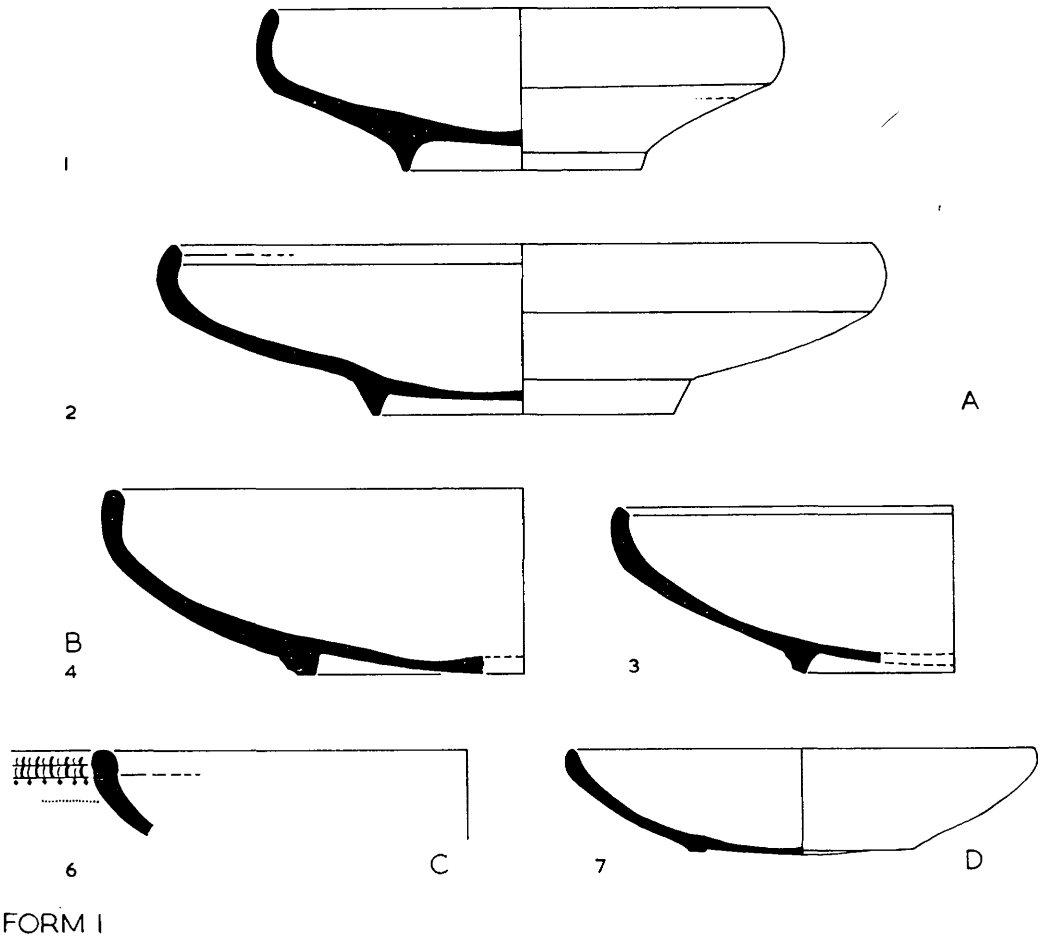


FIG. 65 Scale 2 : 5

C variant with curved wall and plain rim, with slight thickening. Rouletted decoration on outside of rim. No complete examples.

D Small variant, with shallow curved wall and plain rounded rim; low foot. Undecorated.

Size-range: D. mostly 20–32. Type D: D. *c.* 10–18. Not uncommon (apart from Type C, which is rare).

Examples:

Type A

*1 Saloniki, uncat. D. (rim) 16·8.

*2 Saloniki 439, from W. cemetery (Βαρδάρι). D. 23·6.

*3 Athens Agora P 27170. Est. D. *c.* 22·5. Fragmentary.

Type B

*4 Abu Mena 65/539. D. *c.* 28·0. Close to Type A.

5 Saloniki 440, from W. cemetery. D. (max.) 22·7. Low rim (as **2**); low foot.

Type C

*6 Athens Agora P 27161. Fr.; est. D. *c.* 25·4. Exterior of rim fired purplish (edge indicated on profile by dots); rouletted.

Type D

*7 Saloniki 441, from W. cemetery. D. 15·6.

(8 Ventimiglia; Lamboglia, *Albintimilium* i 175, fig. 101; *id.* (1963) 177, form 33. D. *c.* 9·7. Perhaps a variant of Type D, tending towards Form 3.)[1]

Type A appears to be the direct successor of the late Çandarli ware Form 4, which it closely resembles in its general shape and the treatment of the foot. Some examples (e.g. **3**) exhibit an intermediate fabric, with a fairly thick and rather glossy slip on the inside combined with the characteristic discoloration of the exterior of the rim. It may therefore be said to form a bridge between the two wares. An indication of the date of this type is provided by the Agora piece **3**, which comes from a group of the end of the fourth century (Agora Deposit I 15:1; coins to Theodosius I). No. **4**, of Type B, comes from the Cistern group at Abu Mena, together with other fragments of similar vessels; its near-complete state indicates a date around the third quarter of the fifth century. The Saloniki dishes **1**, **2**, **5** are from the same cemetery as Form 2.5–6, and some early examples of Form 3; a late fourth- to mid fifth-century date for these would therefore be quite appropriate. A fr. of Type B(?) from the Athenian Agora, published by Robinson,[2] was found together with local pottery of the first half of the fifth century.[3] Type D is the normal small version of the form. Fragments occur in the Athenian Agora in mid fifth century(?) groups; the type is also present in the Abu Mena Cistern group. Sherds of this type occur in considerable quantity in a deposit in the E. cemetery

[1] This piece appears to be unique among the finds from Ventimiglia. Lamboglia, in his most recent article, classes it under his *t.s. lucente*, but the identification seems in doubt (it was previously listed as *t.s. chiara*). The piece has a hollowed base, a feature apparently not found on other pieces of *t.s. lucente*. Lamboglia's description of the fabric would fit an identification as *Late Roman C* ware; its context (late fourth or early fifth century) is appropriate.

[2] Athens Agora P 11560; Robinson, *Athenian Agora* v M 310, pl. 71.

[3] I prefer a dating rather earlier than that proposed by Robinson; cf. the date proposed for M 350 = Form 3.18 below.

at Saloniki,[1] together with numerous examples of Type B (and A?) and of Form 2A–C, and some early pieces of Form 3; the date of the deposit would appear to be mid fifth century. The date of the rare Type C is not very clear, but it may prove to be the antecedent of Form 3; a *terminus ante quem* is provided by the sherd **6**, from a context of *c.* 460–475.

Suggested dates:

Type A—late fourth–early fifth century.
Type B—early–third quarter fifth century.
Type C—uncertain, perhaps first half of fifth century.
Type D—early–third quarter fifth century.

FORM 2

Antioch 910.

Dish with shallow curved body and broad flaring rim, flattened on top. Flat base, hollowed out on underside to form a false foot (sometimes a low foot, produced by turning). Often rather underfired, with an orange tone; the edge of the rim may be discoloured. Stamped decoration on the larger examples. I distinguish three Types:

A large, with stamped decoration on the floor in one or two zones, each surrounded by a single shallow groove. D. *c.* 27–38.
B medium-sized or small, undecorated. Rim narrower than on Type A, often slightly convex; occasionally a groove at lip. D. *c.* 16–24 and *c.* 11–14.
C a rare variant of B, with rim continuing line of wall, and stepped on top to form two flat bands.

Types A and B very common.

Examples:

Type A
*1 Athens Agora P 27046. D. 35·2. Fragmentary. Decoration: palm-branches (Motif 1[2]) radiating from centre; outer band of circles (Motif 2); a groove round each.
*2 Athens Agora P 27057. Est. D. 32·2. Fragmentary (profile restored from two frs.). Orange ware and slip. Decoration missing.
3 Dinogetia (Rumania); Ştefan, *Dacia* xi–xii (1945–47) 305–6, figs. 3, 4.1. D. 31·4. Decoration: seven cross-monograms (Motif 62), surrounded by groove.

Type B
*4 Saloniki, uncat. D. 22·6. Badly worn. Groove at lip.
5 Saloniki 489, from W. cemetery (Βαρδάρι). D. 21·3. Rather wider rim.
*6 Saloniki 443, from W. cemetery. D. 17·2.

Small
(No complete examples. Many frs. from Saloniki (E. cemetery), and Corfu (Roman Baths), a few from the Athenian Agora.)

[1] Θεολογική Σχολή, 1965, X 5; fill under floor of a late building. For findspot see *Arch. Delt.* xxi (1966) B, 338–9, pl. 347 b.

[2] See below, pp. 350–1.

Type C

*7 Athens Agora P 11341. Est. D. 27·5. Fragmentary. Upper part of exterior fired grey.

This form appears to be the normal medium for stamped decoration of the 'Palm-branch Style' (Group I, see below); the characteristic hollowed base is normally associated with this kind of decoration. Both the shape and the decoration of these dishes are strongly influenced by African R.S. Ware types of mid–late fourth century date (cf. R.S. Ware Form 59, etc.). Form 2 is presumably a conscious imitation of the African products; any influence in the opposite direction may be ruled out on grounds of distribution (see MAP A14).

The earliest dated example of the Form (and of *Late Roman C* as a whole) is a sherd of Type A from an Athenian Agora deposit of around 370 (Agora Deposit F 15:3; latest coin is of Valens). In the various Agora deposits of the end of the century Form 2 is common (especially Type A); **1** comes from these groups. The

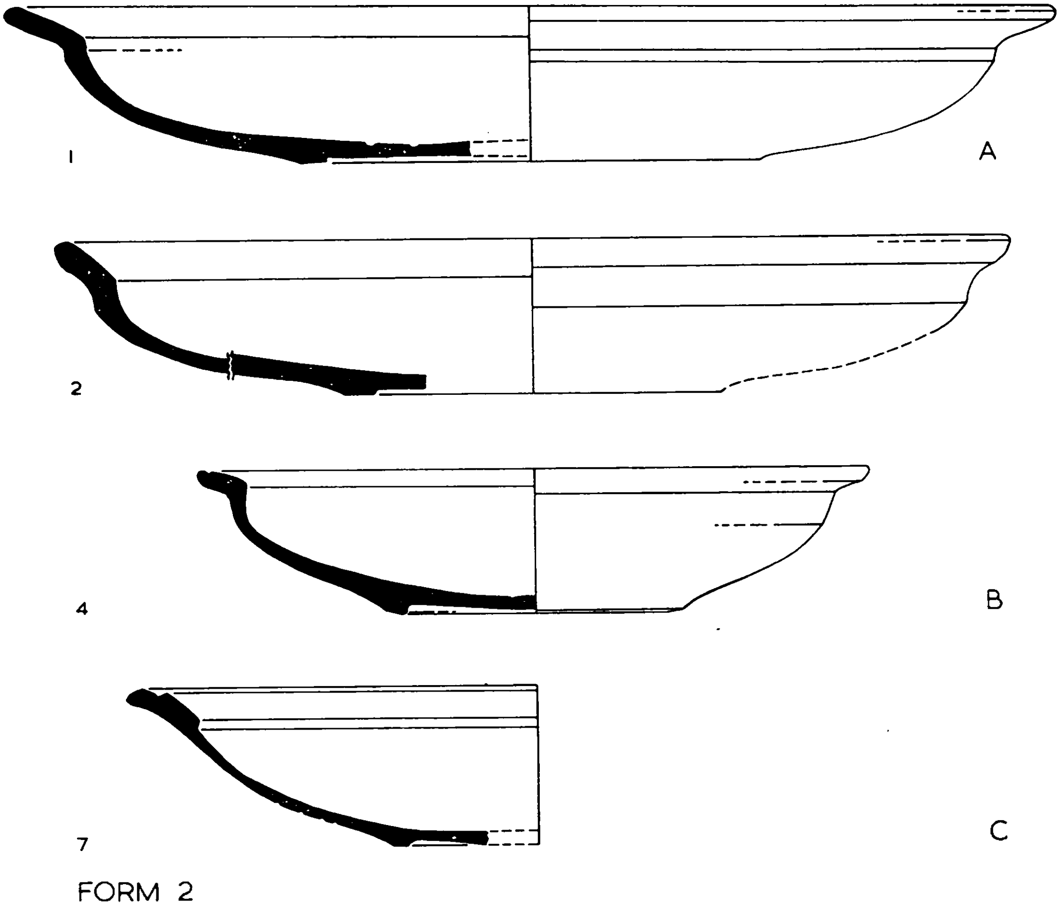


FIG. 66 Scale 2 : 5

same deposits produced a number of stamped bases of Group I which should go with these (see FIG. 72). No. **2** comes from a group of *c.* 400. The piece **3** stands rather apart from these; on stylistic grounds it must be later, for the use of the cross-monogram links it with the succeeding phase. Discovered, as we are told, at the bottom of a Justinianic level, it may belong to a previous period of occupation, of uncertain date. I suggest a dating of *c.* 425–450. There is no evidence that the form was made after the middle of the fifth century, when Form 3 became the standard vessel-type. The variant Type C appears to be early; **7** was found together with mid-late fourth-century material.

FORM 3

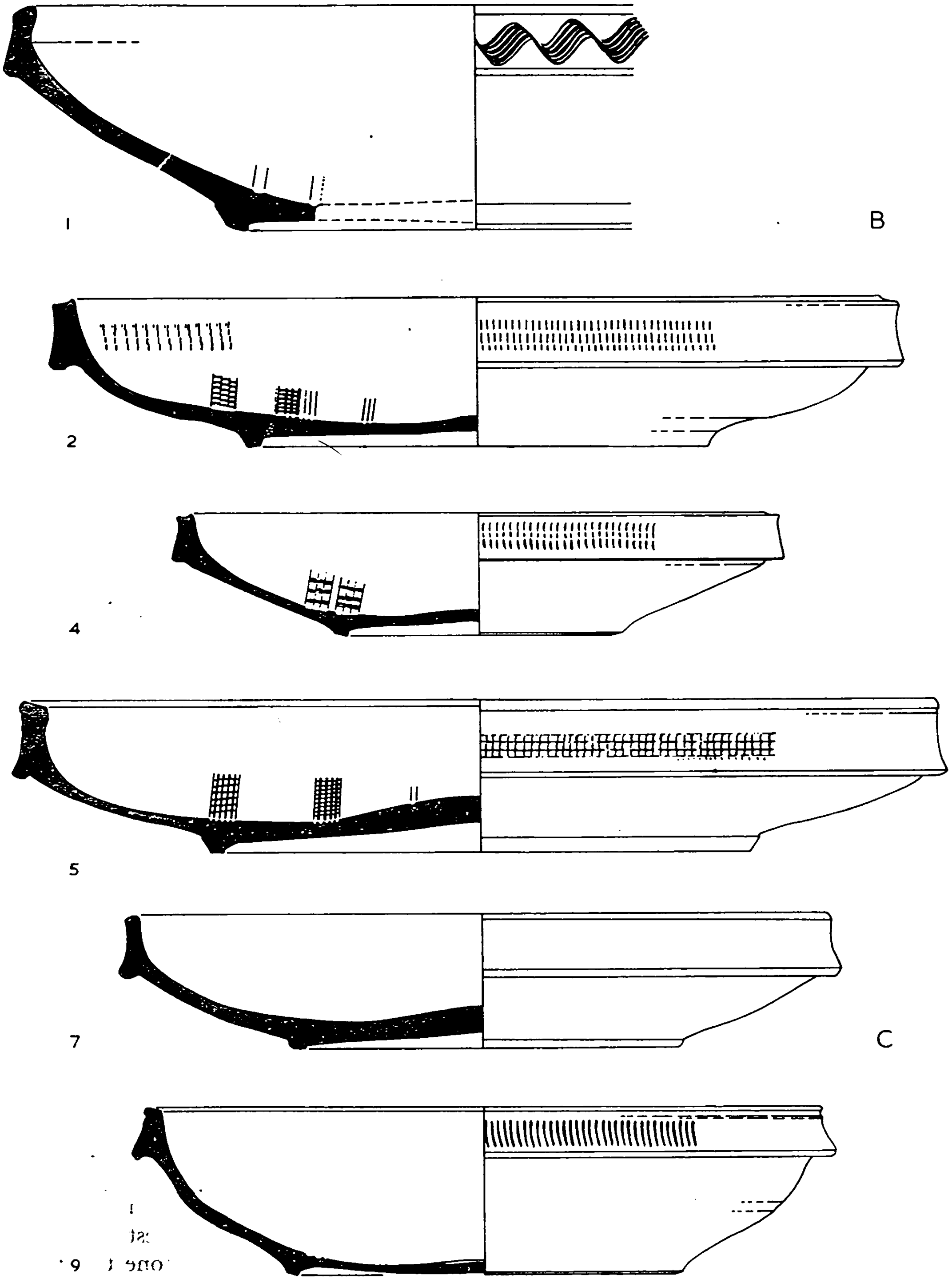
Antioch 940–947.

Dish/bowl with vertical rim incorporating a flange. A large class of dishes and bowls of varying depth. Flaring wall, curved, slightly angled or almost straight; low foot or false foot (as on Form 2), produced by turning. Vertical thickened rim, generally concave on outer face, with more or less pronounced overhang at bottom. Outside of rim frequently discoloured (black, brown, etc.) as a result of firing-conditions. Stamped decoration on floor, often combined with grooves and rouletting; frequently rouletting on outer face of rim. Size-range: normal versions D. 19–36; the largest pieces (D. 32 or more) are early, almost all Type B. Small versions without decoration also occur (D. *c.* 10–18).

The typical *Late Roman C* vessel-form, accounting for at least half of the total production. A more or less consistent development, spanning some 150 years, may be traced. This development, which consists mainly in a progressive shortening and thickening of the rim, with a corresponding increase in the overhang at the bottom, has already been outlined in some detail by Waagé.[1] The classification proposed below for the most part follows Waagé's scheme, with a certain amount of regrouping. The latest shape in Waagé's series (949), which exhibits certain new features, is here classified as a separate form (see Form 10 below). The following types are distinguished:

- A early variant with tapering rim, forming a carination or a slight lip on exterior at junction with wall. Rouletting on the rim of larger examples. Cf. Form 1C, which could be its predecessor. Large and small sizes. Not very common.
- B with tall vertical rim, thickened on outside to form a slight flange at bottom, and slightly bevelled or concave on top, with the highest point at the inner edge. Outside of rim fairly flat, and usually decorated with a triple row of fine rouletting (executed with a multiple wheel); a few examples bear wavy combed lines. Dishes, sometimes of large size. Foot often angular, bevelled, of large diameter. Elaborate decoration on the floor. Cf. Antioch shapes 940, 941f.
- C with tall vertical rim, thickened on outside to form a narrow flange; outer face flat or slightly concave; top either flattened, with the highest point at the outer edge, or slightly convex. In some cases rouletting (one to three lines) on outside. Mostly bowls. Cf. Antioch shape 941k.

[1] *Antioch* iv.i 53.



FORM 3

FIG. 67 Scale 2 : 5

D with lower part of rim bulging outwards to form a thick roll; normally a triple row of deeply impressed rouletting on outside. Not common.

E a continuation of Type C. Rim still vertical, but with rather greater overhang at bottom; underside flat or concave, with a slight offset at junction with wall. Often one or two lines of rouletting on outer face. Cf. Antioch 943.

F a continuation of Types D, E. Rim lower, projecting more strongly; exterior concave, or rolled as on Type D, underside broad and flattish, with offset at junction with wall. On some examples deeply impressed rouletting on outer face. Cf. Antioch shapes 944, 946.

G as Type F, with flat or slightly convex outer face; corresponding hollow on inside. No rouletting. Cf. Antioch 947 a,u.

H variant with heavy triangular rim, with or without offset on underside at junction with wall; sometimes a single line of rough rouletting on outer face. Thick-walled fabric, rather coarser than usual; slip rather thick and glossy on inside. Cf. fabric of late Çandarli ware, Form 4.

The small versions of the form are mostly early.

Examples:[1]

Type A

No complete specimens; the type is represented by a few rim frs. from Saloniki, Corinth, the Athenian Agora, Corfu, etc.

Type B

*1 Athens Agora P 7636. Est. D. (outer edge of lip) 35, est. H. *c.* 8·6. Three frs. of one vessel; profile restored. Deep form, close to Type A; thick-walled. Wavy combing on outside of rim; two decorated zones on floor, the outer one bearing circles (Motif 2, of Group I).

*2 Athens Agora P 8646. D. *c.* 32·0. Shallow, with bevelled foot; top of rim concave. Triple line of rouletting on rim; four lines of rouletting on inside below rim. Decoration: lions and floral motifs (Motifs 12, 21, 36), in two zones, surrounded by grooves and two bands of rouletting. PLATE XXI *b*.

3 Labraunda; Hellström, *Labraunda* ii.i 74, pls. 16, 37, no. 332. D. 34·5. Fragmentary. Similar, with flat-topped rim. Four lines of rouletting on rim. Decoration: lions as on **2** (Motif 36) in zone round floor, with three bands of rouletting as on rim; centre missing (probably further stamps).

*4 Athens Agora P 2500. D. 22·8. Rather small, with top of rim concave. Triple rouletting on rim. Decoration: a single 'lioness' (Motif 38) at centre, surrounded by two bands of rouletting.

*5 Athens Agora P 3079. D. 34·5. Rim tending to Type C: flat-topped, with highest point at outer edge. Shallow form, with bevelled foot. Triple rouletting on rim. Decoration: cross (Motif 70) at centre, surrounded by a groove; outer band of floral stamps (Motif 13), between two bands of rouletting.

[1] Only a selection of the more complete examples from the Athenian Agora are listed here; the rest will appear in the forthcoming Agora volume.

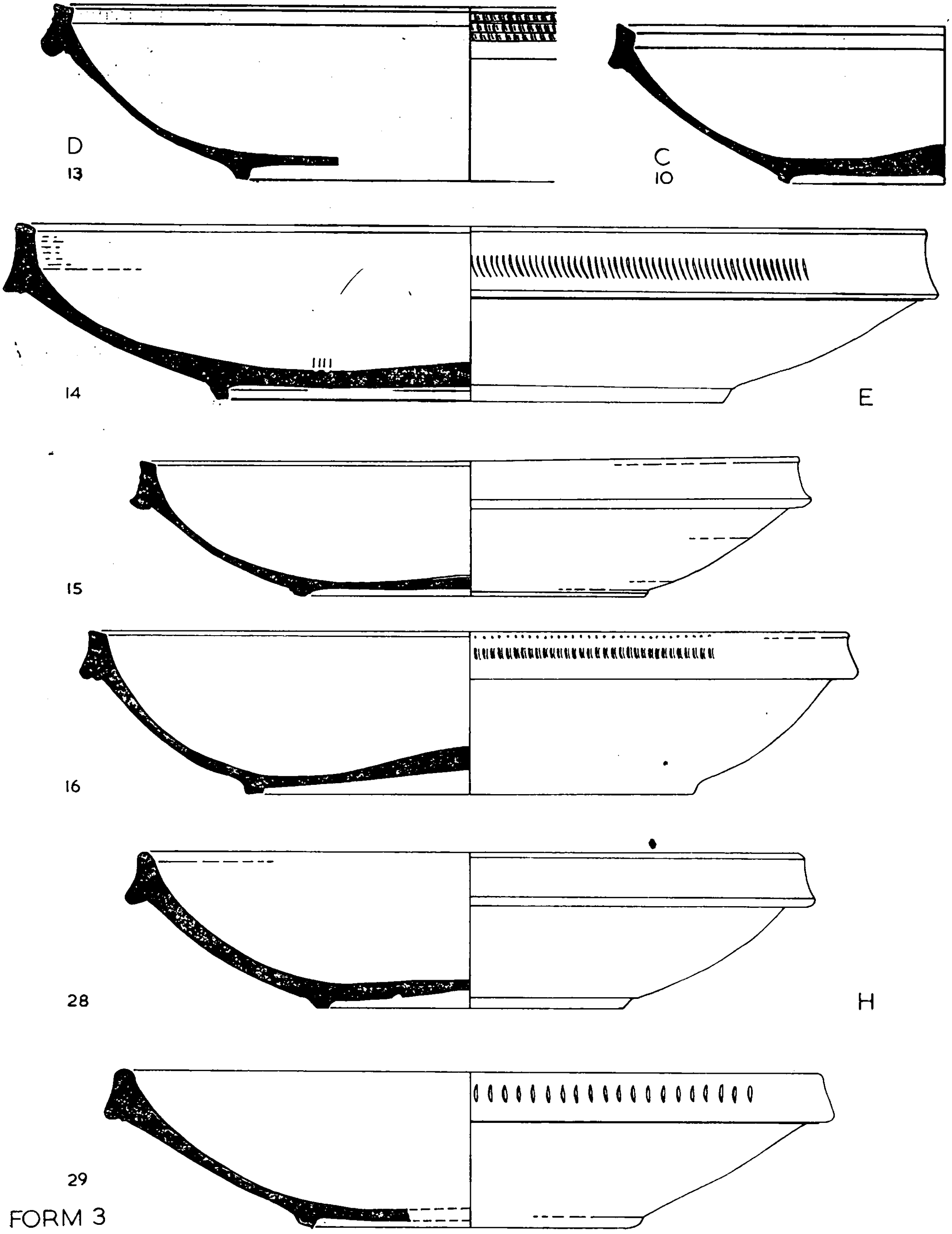


FIG. 68 Scale 2:5

6 Argos, French excavations, C. 400. D. 35·4. Similar to **5**; no rouletting. Decoration: two hares(?) (Motif 35), surrounded by two grooves. Cf. also **14** below.

Type C

*7 Athens Agora P 8650. D. 27·0. Shallow (cf. Type B), with round-topped rim. Rather thick-walled. Cross (Motif 71) at centre of floor; no other decoration.

8 Tiritaka (Crimea); *Materiali* 25, p. 42, fig. 40.1–2. Small-sized. D. *c.* 15·5?[1] Similar. Cross-monogram with pendants (Motif 67) at centre; no other decoration.

*9 Athens Agora P 2499. D. 25·6. Flat-topped rim, with one line of long rouletting on outside. Decoration: stag (Motif 41) at centre; two/three grooves round floor.

*10 Athens Agora P 27027. Est. D. 25·3. Fragmentary. More chamfered rim. Clay and slip orange, rather soft-fired. Cross (Motif 73) at centre of floor; no other decoration. PLATE XXI *b*.

11 Silet edh-Dhahr (Palestine); Sellers and Baramki, *BASOR* Suppl. Studies 15–16 (New Haven, Conn., 1953) fig. 30.3. D. about 26. Cross at centre (perhaps Motif 71?); no other decoration. *Ibid.*, fig. 30.1 appears to be similar, but more fragmentary.

12 National Museum of Wales, Cardiff, from Dinas Powis; Alcock, *Dinas Powys* 128–9, fig. 25, pl. VII a; *Archaeology* 17 (1964) 105–6, figs. on p. 108 (top). D. *c.* 22·4. Form tending to Type E/F; cf. **17** below. Decoration: five or more hares (Motif 35 (late); all same stamp) round centre, surrounded by a slight groove.

Type D

*13 Athens Agora P 27055. Est. D. 32·0. Fragmentary. Triple line of deep rouletting on rim. Probably a single stamp at centre (missing).

Type E

*14 Delos, uncat. D. 35·1. Shallow, as Type B, with bevelled foot; slightly more projecting rim, with small offset on underside. One line of rouletting on rim. Decoration: two birds (peahens (Motif 50), beak to beak), surrounded by two grooves.

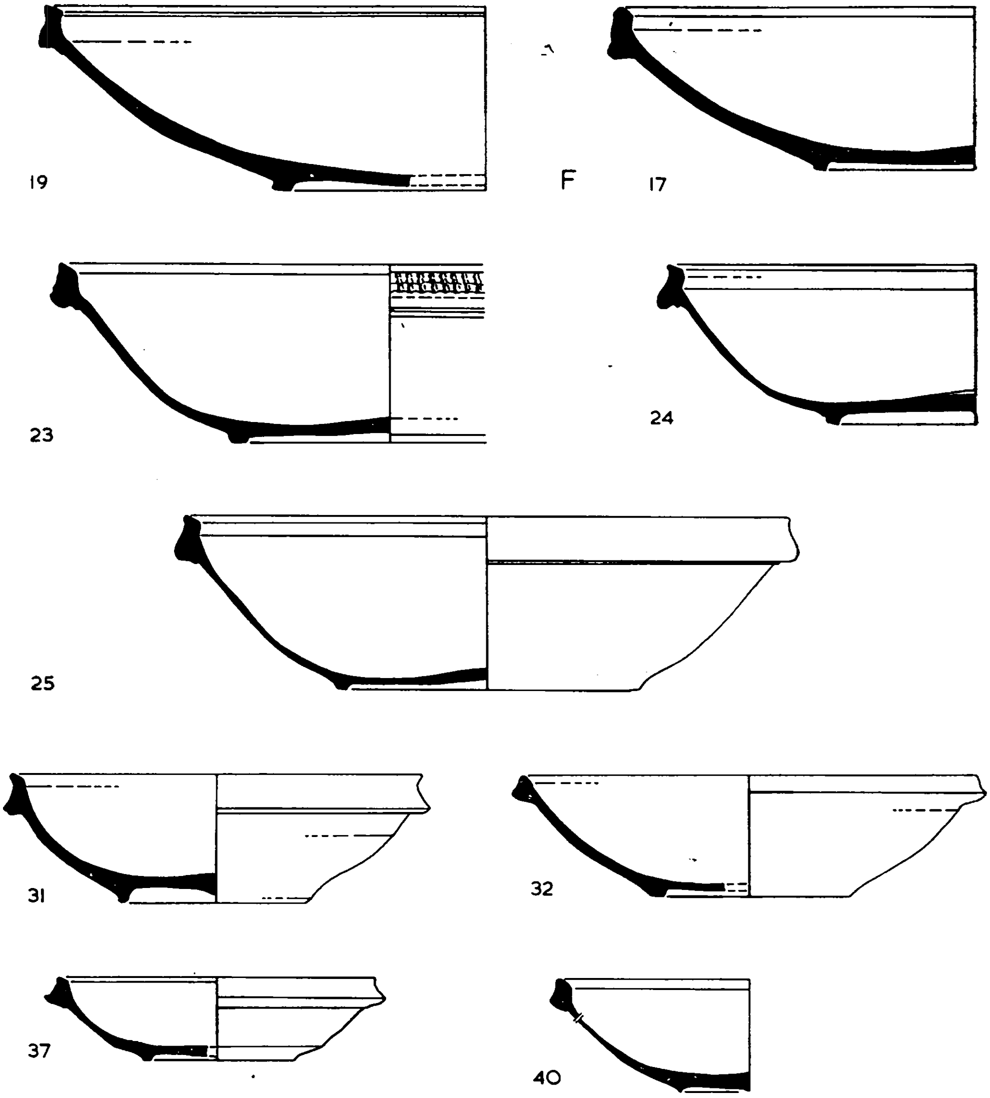
*15 Corinth C–34–309/2452. D. 25·3. Rim close to Type C (cf. **9**), with slight offset on underside. Decoration: running 'lioness' (Motif 39) at centre of floor.

*16 Athens Agora P 25032. D. 29·3. Normal; one line of rouletting on rim. Decoration: cross-monogram with pendants (Motif 68) at centre.

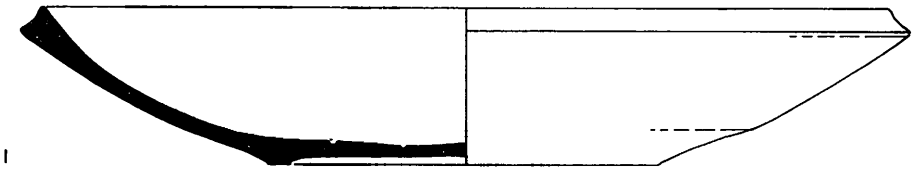
Type F

*17 Athens Agora P 9658; Robinson, *Athenian Agora* v, M 351, pl. 36. Est. D. 24·0. Fragmentary. Close to some examples of Type C, with lower rim. Rim rounded on top, almost flat on outside and underside; no rouletting. Decoration: crosses (Motif 73?) on floor; originally probably three, side by side.

[1] On the basis of the published scale. This is exceptionally small for a stamped vessel; can it be correct?



FORM 3



FORM 4

FIG. 69 Scale 2 : 5

18 Athens Agora P 9657; Robinson, *op. cit.* M 350, pls. 33, 36, 71. D. 25·3. Normal; rim concave on exterior and on underside. Decoration: animal (Motif 43) at centre.

*19 Athens Agora P 19629. Est. D. 29·6. Fragmentary. No decoration preserved; centre missing.

20 Antioch excavations; Waagé, *Antioch* iv.i 53, pl. XI, shape 944f. D. *c.* 26. As **19**; decoration not indicated.

21 Khirbat al-Karak; Delougaz (1960) pls. 31.10, 33.2, 54.7. D. *c.* 27·6. Related to Type D (**13** above), with more developed rim-profile. Three lines of short notch-like rouletting on rim. Decoration: cross with pendants (Motif 70, late) at centre.

22 Auja Hafir; *Nessana* i pl. XLVIII, shape 14, A 3 (stamp: pl. LIX C3). D. *c.* 23·0. Thickish rim, related to Type D, with two lines of rouletting. Small cross (type uncertain) at centre, surrounded by two grooves.

*23 Athens Agora P 3590. D. *c.* 22·3. Short thick rim with slight bulge at bottom; three close-set lines of deeply impressed rouletting on outside. Decoration: stag(?) (Motif 41) at centre of floor.

*24 Corinth C–34–2070. Est. D. 20·6. Fragmentary. Rim plain, bulging at bottom. Decoration: poorly impressed cross with double outline (Motif 71; cf. FIG. 79 g) at centre.

*25 Athens Agora P 26088. D. 20·3. As **24**. Decoration: cross with pendants (Motif 79; FIG. 79 r) at centre.

26 Khirbat al-Karak; Delougaz (1960) pl. 54.9. D. *c.* 22·0. Rim projects sharply at bottom. Undecorated.

Type G

No complete examples; cf. *Antioch* iv.i pl. XI, shape 947a.

Deep variant

27 Samos, Heraion (old inv. no. 850); Schneider, *AM* liv (1929) 127–8, no. 5, fig. 19. D. 28, H. 10. High curving wall, low foot of small diameter.[1] Decoration: part of a stamped cross (Motif 71) preserved at centre.

Type H

*28 Athens Agora P 13084. D. 25·6. Fragmentary. Early; close to Type C (cf. **7** above). Concave rim, undecorated. Decoration: four double volutes in circle (Motif 33) at centre.

*29 Athens Agora P 4166. D. 27·4. Centre missing. Normal version; one line of rouletting on rim. Decoration: four palmette-and-volute motifs (Motif 10) round floor.

Small varieties; all types

*30 Saloniki 446, from W. cemetery. D. 17·2. Shallow; rim between Types A and C.

*31 Saloniki 4998. D. 13·7. Type C.

*32 Athens Agora P 3082. Est. D. 15·2. Fragmentary. Short rim; related to Form 4?

33–34 Saloniki 444, 445, from W. cemetery. D. 12·7, 12·3. Similar.

[1] A unique profile.

35 Tanais (Russia); Knipovich, *Tanais* (Moscow, 1949) 70–71, fig. 26.6. D. *c.* 16·5(?). Fragmentary. Apparently a vessel as **32.**

36 Sucidava (Rumania); *Mat. arh. privind ist. veche a R.P.R.* i (1953) 712, no. 9, fig. 13 d. D. *c.* 13·5. Probably this ware; if so, early in the series.

*37 Athens Agora P 4133. D. 10·6. Type F.

38 Olbia; Knipovich (1929) 50, fig. 12.6. Small; size uncertain. Type F.

39 Sami (Greece), Roman Baths (in Argostoli Museum). D. 16. Type F; rim-form similar to **18.**

*40 Tocra (Cyrenaica), 1964 excavations, uncat. Est. D. 13·0. Fragmentary (profile restored from two frs.). Type F.

41 Volos Mus. (Greece) K 67. D. 10·4. Similar.

42 Antioch excavations; Waagé, *Antioch* iv.i pl. XI, shape 944u. Type F; cf. **19–20** above. D. *c.* 12·8.

43 Beit Shean (Palestine); Fitzgerald, *Beth-Shan* iii pl. XXXI, 15. D. 15. Type F, with rim projecting at bottom (cf. **26**). *Ibid.* pl. XXXI, 16 is a larger version of Type F.

Along with the change in rim-form, the decorative schemes on the standard-sized examples of this form undergo considerable modification, as the descriptions above indicate. The typical floor decoration associated with Type B (and more or less confined to it) consists of one or two zones of stamped decoration alternating with bands of multiple rouletting similar to that used on the rim (= Group IIA below). The corresponding bowls of Type C mostly bear one or two repeated stamped motifs round the centre, confined by one or more grooves (= Group IIB). The repertoire of both types is similar. On some pieces of Type C a simplified scheme is adopted, with a single stamp or group of stamps at the centre and no grooves; this serves as the model for the succeeding types, on which a single central stamp becomes more or less standard (Group III). Stamped decoration is rarely completely lacking on the standard-sized vessels, though it rapidly disappears on the succeeding Form 10. No. **26**, which is late, may indicate the beginning of the process of decline.

The fabric of the great majority of examples is uniform, but a small series of thicker-walled and coarser pieces, typified by Type H, may indicate the existence of a second production centre. These vessels have the thicker ware and thicker, more glossy slip already noted in the case of some examples of Form 1; they seem closely related to the earlier Çandarli ware, and in some instances actually exhibit the same sparse flakes of golden mica (a feature not otherwise found in *Late Roman C*). Nos. **1**, **7** and **17** in the Catalogue above, together with the examples of Type H, may belong to this category. Another local variant of the ware is perhaps to be seen in a small piece from Sardis (1962 excavations), closely resembling **32**, etc., in a markedly micaceous ware. Their bearing on the place of manufacture of *Late Roman C* is discussed below.

The dating-evidence for individual pieces of this form is good, but it is less easy to lay down hard and fast date-ranges for the various types distinguished above, since (as may be seen from the list above) the limits of these are to a large extent arbitrary, depending on which features are regarded as indicative of a particular type. Form 3 is the characteristic *Late Roman C* vessel-shape in groups of

the second half of the fifth and the first half of the sixth century, accounting for some 80–90% of the total production during that period. It supersedes the early Forms 1–2, and finally evolves into the equally common Form 10.

The date of the first appearance of the form is uncertain. It appears to be totally absent in the many fourth-century deposits in the Athenian Agora, including those dating from around 400; by the end of the third quarter of the fifth century, however, it is well established and has already undergone a certain amount of development, to judge by the finds of that period from the Agora and elsewhere.[1] The rare Type A (together with its presumed predecessor, Form 1C) is represented in these latter deposits by a few sherds only, and it is clear that it had by then been superseded by Types B and C, which themselves show signs of development. It would therefore be reasonable to place this type before 450, alongside the later pieces of Form 2. The early variant of Type B, no. **1**, should belong to the same period, to judge by its decoration, which is in the style generally associated with Form 2. It was found together with African R.S. Form 76.3 and some sherds of Type B, in a context which could be *c.* 450. One may perhaps ask whether the evolution of Type A from Form 1 was not influenced by the contemporary African R.S. Form 61B.

Types B and C are the standard shapes in the series of Agora deposits of *c.* 460–475 (latest coins: Leo I), where for the first time pieces of *Late Roman C* greatly outnumber those of African R.S. Ware. The variety of styles present in these deposits suggest that the two types had already been in production for some length of time; their beginnings should therefore be put back to the middle of the century if not a little before. Nos. **4**, **5**, **9**, **10** and **32** are among the several complete or near-complete examples from these groups; **2** and **7** come from a cistern-group of the same period (Agora Deposit D 6:1).[2] Similar vessels are present in groups of much the same period at Abu Mena (the Cistern group) and Sardis (House of Bronzes, 1961; rather earlier). The Dinas Powis dish **12** should be contemporary with the latest pieces in the Agora groups or rather later; a date around 460–490 is probable, making it the earliest of the series of Mediterranean imports found on Celtic sites in Britain.

The type-specimen of Type D (**13**) comes from the Agora cistern-group noted above. Together with **7**, from the same group, it introduces a new series of vessels bearing a single stamped motif on the floor, without accompanying grooves or rouletting, and provides a forerunner for such sixth-century pieces as **23**. Type D may thus be classed as a late fifth century type. Type E may be fairly closely associated with it; here a second feature typical of sixth-century pieces, the small offset marking off the underside of the rim, makes a tentative appearance. **16**, the best example of the type, comes from a stratified well-deposit (Agora Deposit Q 17:4); its position indicates a date around or just after A.D. 500. **14** is among the last of the series of large dishes of the fifth century, combining the basic shape of Type B with the simpler decorative scheme of later pieces; on stylistic grounds it

[1] The Dura-Europos sherd, *Dura* iv.i. 2, 16, no. 95, pl. V (Type C?) may be discounted as dating-evidence for the form. It is an unstratified find, and probably to be associated with a small group of late lamps from the site.

[2] The latest coin from this group is of Marcian, but the vessels found in it are stylistically quite as late as those in the deposits of the period of Leo I.

may be assigned to the last quarter of the fifth century. The Corinth piece **15** is probably of similar date; a coin of Marcian was found with it. Further evidence for this period is provided by the Kom deposit at Abu Mena and the 17–N and 19–M groups at Antioch (*Antioch* iv.i 56), in which the intermediate types (D and E) largely supplant the early versions of the form (in the former instance together with the later Type F).

The developed sixth-century version, Type F, with its typical broad overhanging rim, appears in quantity in the 13–R deposit at Antioch (*Antioch* iv.i 56–57), which may be assigned with some certainty to the year 526. The Agora pieces **17–18**, found together with African R.S. Ware Form 97.4, may be slightly earlier; their context points to an early sixth-century date. **17**, which does not have the normal offset under the rim, provides a link with certain late pieces of Type C (e.g. **12**). In the Agora deposits of the second quarter of the sixth-century Types F and G are the standard shapes, supplanting Type E (which was still common in the Antioch group). **19** comes from one of these, and **25** (from a stratified well) may be dated to the same period. Another deposit, of the middle years of the century, contained similar material, including **23** and the small piece **37**; the same deposit produced African R.S. Form 104.13, *q.v.* The form does not show any further development; the transition to the late shape Form 10 would appear to have followed not many years later (see below under Form 10).

The variant Type H represents a separate development within the sixth century. It is common only at a late stage. The mid sixth-century Agora deposit just noted contains a fair proportion of vessels of this type, including the complete piece **29**. No. **28**, which may be classed as an early example, is from the same group as **19**, though its fragmentary state and worn condition may be evidence of a rather earlier date (first third of sixth century?).

FORM 4

Dish with curving floor terminating in a thickened rim incorporating a small flange; base hollowed out to create a false foot (as on Form 2). Stamped decoration on floor. Rare, perhaps to be classed as an early variant of Form 3.

Example:

*1 Athens Agora P 8648. D. (max.) 29·8. Badly worn. Decoration: band of palmettes (Motif 8) round floor, between two shallow grooves.

For a similar decorative scheme and similar motifs, see African R.S. Form 75.1 (PLATE XVI *a*). Date probably similar: about second quarter of fifth century. The piece was found in a context of the third quarter of the century, in the same deposit as Form 3.2 and 7 (see above), but its worn condition makes the earlier dating quite plausible.

FORM 5

Antioch 913.

Dish with curved body and broad horizontal rim, slightly concave on top, thickening towards a bevelled lip; low foot; stamped decoration on floor. Also small versions, undecorated. I distinguish two types:

A with relatively short rim, thickish, with slightly rounded underside.

B with broader rim; slightly concave on underside, marked off from wall by a small offset (as on the later examples of Form 3); sometimes rouletting on upper face. Body rather deeper than on Type A.

Size-range: normal size—D. 23–38; small size—D. 15–20. Rather uncommon.

Examples:

Type A

*1 Athens Agora P 8647. D. 35·3. Rim only; whole of floor missing.

Type B

*2 Athens Agora P 4169. D. 27·3. Orange clay, rather soft, with orange-red slip. Rim plain. Decoration: poorly stamped bird(?) (of uncertain type) at centre.

*3 Lechaion, Greece, from early Christian basilica (1960 excavations). D. 24·5. Triple line of deeply impressed rouletting on rim. Centre missing; no decoration preserved.

Small

4 Antioch excavations; Waagé, *Antioch* iv.i pl. X, shape 913k. D. (top of lip) *c.* 15·0. Thick rounded lip.

The above pieces indicate the general development of the form, Type A being earlier than Type B. A transitional stage in the development may be seen in the sherd *Antioch* iv.i pl. X, shape 913u. The general tendency is towards a broader rim with a marked flange at the lip; pieces such as *ibid.* shape 913a presumably belong to the end of the series.

The shape is a contemporary of Form 3, and shows a parallel development. No. **1** comes from a group of *c.* 470 (Agora Deposit D 6: 1; see further under Form 3). The later dish **2** is from the mid sixth-century deposit which produced Form 3.23 and 29. It may, however, be rather earlier than these, for a piece of rather similar form (Athens Agora P 23111) occurred in an earlier sixth-century context. **3**, to judge by the multiple rouletting on the rim, is not later than the middle of the sixth century. The form also occurs at Antioch in an early sixth-century context (see *Antioch* iv.i 57).

Suggested dates: Type A—around 460–500.
Type B—first half of sixth century.

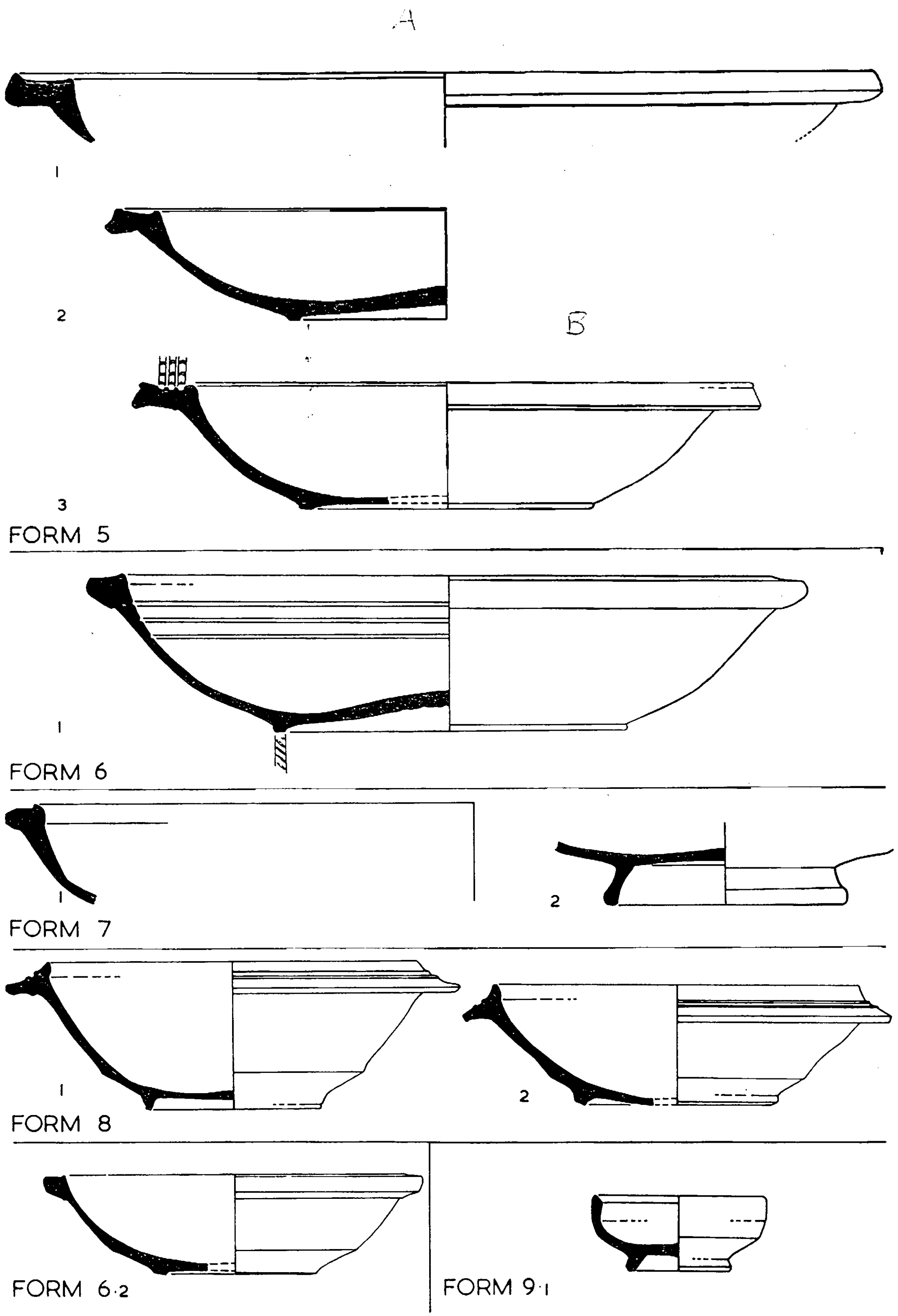


FIG. 70 Scale 2 : 5

FORM 6

Antioch 914(?).

Shallow bowl (or deep dish), with curved body and low foot as Form 3, and heavy knobbed rim, flattened on top, and chamfered on underside, with a small offset at junction with wall; stamped motif at centre of floor. Also a small version, undecorated. Rare.

Examples:

*1 Lechaion, Greece, early Christian basilica (1959 excavations). Max. D. 28·8. Exterior and top of rim discoloured. Three grooves on inside of wall, executed in a single spiral. Stamp: cross with double outline (Motif 71).

Small

*2 Istanbul, Saraçhane (St. Polyeuktos), RP. 42. D. *c.* 15·1.

The stamp on **1** suggests an early sixth-century date. No. **2** comes from a context apparently contemporary with the building of the church of St. Polyeuktos (i.e. *c.* A.D. 525).

Suggested date: early sixth century.

FORM 7

Dish with low steep wall and short outturned rim, bearing a small flange on top along the inner edge. Rare.

Example:

*1 Athens Agora P 27066. Fr.; est. D. 37·4.

A series of dish bases with high feet of slightly knobbed shape are perhaps to be associated with this form (and smaller variants of it). These mostly bear a single stamped motif at the centre of the floor, as on the preceding forms.

Example:

*2 Athens Agora P 12084. D. of foot 9·7. Stamp: cross-monogram with pendants (Motif 67).
Cf. *Antioch* iv.i pl. XI, LC 1–2; Popescu (1965) 710, figs. 11.7, 12 (from Istros).

Perhaps to be classed as a shallow version of Form 6. The Agora rim **1** comes from an early sixth-century group (Agora Deposit I–J 9: 1). The base fr. **2** was found in a deposit of the second quarter of the sixth century, but may itself be earlier; its stamp is apparently identical to that of Form 3.8, which is presumably a late fifth-century piece. The stamp on the Istros base might also be classed as late fifth century; that on Antioch LC 1 (=*Antioch* iv.i fig. 33, third down on right-hand side) is of more normal early sixth-century style (= Group III).

Suggested dates: rims—early sixth century.
bases (perhaps this form)—end fifth to early sixth century.

FORM 8

Antioch 918.

Bowl with broad downturned tapering rim, concave on top, bearing ridges or grooves. Body carinated, with small foot. Normally two small ridges on the rim; sometimes a small offset on underside at junction with wall. Surface on inside generally rough with fine brush-marks; no stamped decoration.

Normal size: D. *c.* 12–20. Waagé (*Antioch* iv.i 57) reports two rims of large diameter from Antioch; cf. Form 7 above. Rather uncommon.

Examples:

- *1 Athens Agora P 2501. D. 18·2.
- *2 Athens Agora P 2505. D. 17·0.
- 3 Istanbul, Saraçhane (St. Polyeuktos) RP.1; *DOP* xix (1965) 235, fig. D, 1. D. 13·0.
- 4 Jerusalem, Dominus Flevit cemetery; Bagatti and Milik, *Gli scavi del 'Dominus Flevit'* i 136, fig. 32, no. 10. D. *c.* 14·7.
- 5 Caucana, Sicily (recent excavations). One example as the above.[1]

Variant

- 6 Vienna, Kunsthistorisches Museum IV. 3094, from Ephesus. D. 15·9. Rim concave on top, bearing a single groove down middle; offset on underside.

The Agora pieces (**1–2**) both come from deposits of *c.* 460–75 (latest coins: Leo I). **3** comes from a deposit sealed in A.D. 524/5, but may itself be earlier. The form appears at Antioch in both fifth- and early sixth-century contexts (see *Antioch* iv.i 56–57). The variant **6** may provide a link with the small version of Form 6, which could be its successor.

Suggested date: second half of fifth century, and possibly slightly later.

FORM 9

Small dish with vertical rim, flat floor and bevelled foot of medium height. Plain. Normal size: D. about 7. Uncommon.

Example:

- *1 Istanbul, Saraçhane (St. Polyeuktos) RP. 17. D. (max.) 7·0. Cf. *DOP* xxii (1968) 208, 211, no. 65, fig. F.

Not related to Form 1, which it resembles in shape. A fr. is present in the same group as Form 7.1 (*c.* 520–540). **1** is from a disturbed context, but other examples of this form from the same site occur in late sixth-century groups.

Suggested date: c. 520–600.

[1] Kindly brought to my attention by Dr. P. Pelagatti, who will be publishing it shortly.

FORM 10

Antioch 949.

Dish/bowl with sloping wall, curved or almost straight, low foot and knobbed or flattened rim, rounded on the outside, and concave underneath, with a small offset at junction with wall. Ware as the above; inside surface generally rough, with fine brush-marks. A few early examples bear stamped decoration. The successor of Form 3.

Size-range: D. 20–30; also a few small-sized examples, D. 15–20. Very common.

Three types:

A with heavy rim, knobbed or of squarish profile. Antioch 949 a–k.

B with slightly elongated rim, rounded on top and in some cases slightly hooked. Antioch 949 s.

C with elongated rim flattened or concave on top, slightly everted. Antioch 949 p, u, y.

Examples:

Type A (knobbed rims)

*1 Tocra, Cyrenaica, 1964 excavations, uncat. Est. D. *c.* 23·5; fragmentary. Floor smoothed, with edge of a stamp at centre preserved; wall rough (see profile). Knobbed rim.

*2 Athens Agora P 27071. Fr.; est. max. D. 28·6. Similar.

3 Antioch excavations; Waagé, *Antioch* iv.i pl. XI, shape 949a. Max. D. *c.* 21·7; fragmentary. Similar.

*4 Corinth C–56–30. Est. max. D. *c.* 27·5; fragmentary. Squarish rim; cf. Form 3H.

5 Corinth C–36–1557. Max. D. *c.* 28·0; fragmentary. Similar. Floor smoothed (cf. **1**); centre missing.

*6 Corinth C–56–14. Max. D. 28·0. Knobbed rim, rather upright. Centre missing.

Type B

*7 Athens Agora P 27068. Est. max. D. 27·6; fragmentary. Hooked rim.

8 Sucidava (Rumania); Tudor, *Dacia* xi–xii (1945–47) 171, no. 8, fig. 22.1. Max. D. 25·7. Similar.

9 Istros (Rumania); Popescu (1965) 712, fig. 14. D. *c.* 22·5. Rim plainer. Poorly impressed cross (Motif 73) at centre.

10 Khirbat al-Karak; Delougaz (1960) pl. 54.6. D. (rim) *c.* 25·6. Transitional to Type C; rim flat on top, but hooked below (as **7**–**8**), with slightly concave outer face. Wall curved. Undecorated.

Type C

*11 Emporio, Chios, from main settlement. Max. D. *c.* 27·6. Three discontinuous grooves on wall (probably accidental).

*12 Porto Rafti Island, Greece (from late settlement); cf. Hood, *Acta Mus. Nat. Pragae* xx (1966) 171, fig. 18b, 2–3. Fr.; est. D. 20. Slightly knobbed rim.

*13 Newcastle upon Tyne, Mus. of Antiquities (under 1956.23.26), from Bomba, Cyrenaica. Fr.; est. D. 25. Very elongated rim.

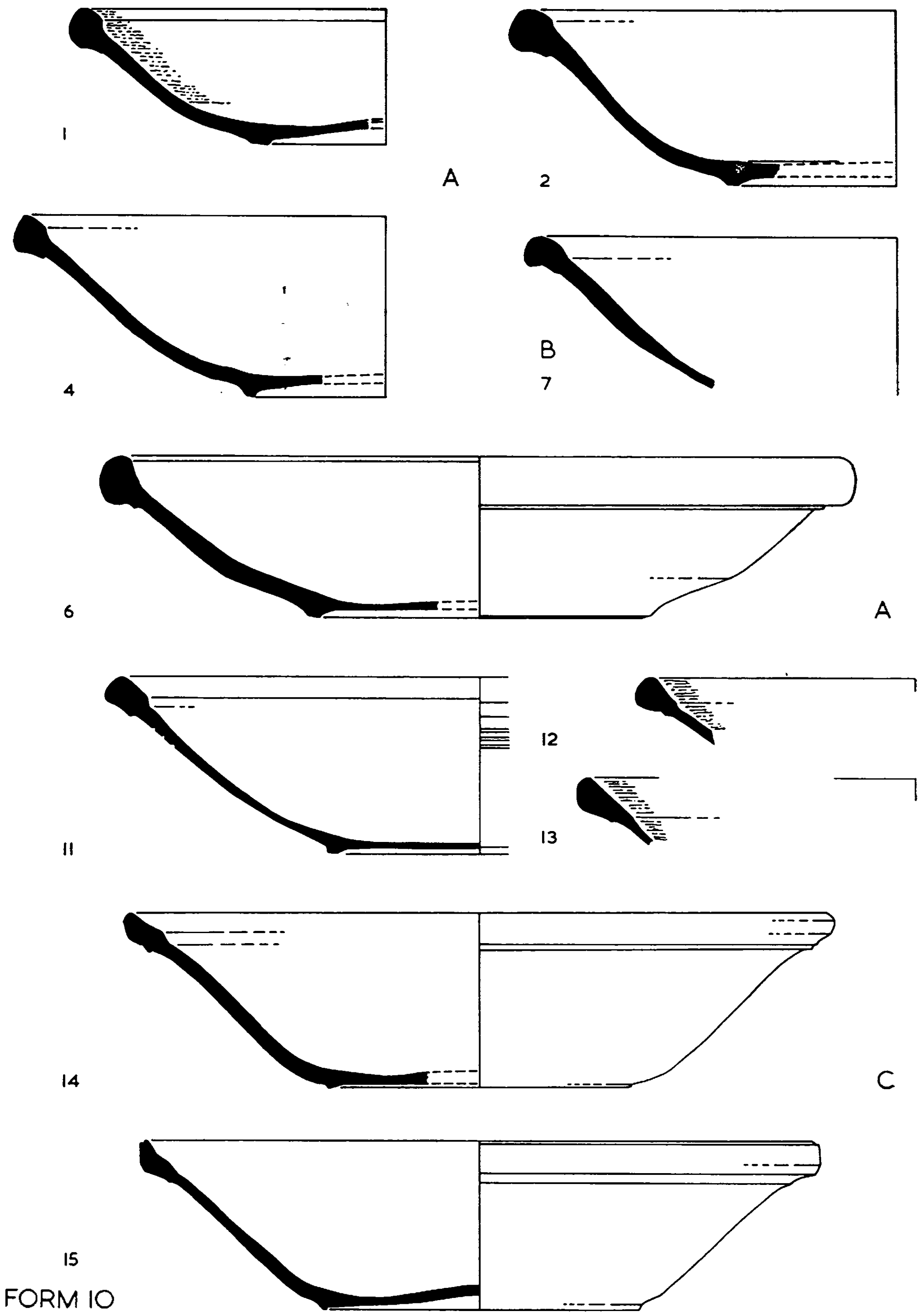


FIG. 71 Scale 2 : 5

*14 Emporio, Chios, from Byzantine fort. Max. D. 26·2. Rim slightly concave above and below.

*15 As **14**. Max. D. 25·1. Rim more upright, concave on inside, with vertical outer face.

Small

16 Antioch excavations; Waagé, *Antioch* iv.i pl. XI, shape 949u. Max. D. *c.* 16·0; fragmentary. Cf. **11**.

The development of this form is not very clear; the rim-form alone does not provide a sure indication of date. Two other factors may be significant: the general body-form and the presence or absence of stamped decoration. A rounded wall (as on **1**, etc.) appears to be a characteristic of the earlier examples, whereas pieces with a straight flaring wall rising more or less direct from the foot (as on **14–15**) are almost certainly late. In general, the earlier body-profile is associated with rims of Types A and B, while the later shape occurs with the more developed rims of Type C. The vessels bearing stamped decoration should certainly be classed as early, the direct successors of Form 3. It may be noted that all of these have a more or less rounded profile. For this reason a piece such as **9** should be classed among the earlier examples, although its rim-form is not unlike that of some later specimens. Nos. **4–5**, with their squarish rims, come very close to the latest examples of Form 3 (Type H), proving a direct connection between the two forms. The peculiar rim-form of **15** would appear to be confined to some of the very latest examples; no further development is attested.

The earliest securely dated pieces of Form 10 are of around the 580s. No. **7** comes from a deposit (Agora Deposit Q 13:4) which produced a coin sequence ending with several of Justin II (the latest legible being an issue of 574/5). No doubt very similar in date is **8** from Sucidava. The coin-evidence from this site indicates that it was finally abandoned shortly after 587, at the time of the Avar invasions; the dish would fit this date very well.[1]

The Istros example **9** is stated to come from a context of the second half of the sixth century (Popescu (1965) 712). Nos. **4** and **6** were found in the same cistern-group as African R.S. Ware Forms 99.23 and 105.3, together with a single coin of Justin II; a date around 600 seems likely. The Khirbat al-Karak specimen **10** is from the same context as African R.S. Form 104.27, and should be of similar date. **2** may be rather later; it was associated with coins of Heraclius. At Antioch, Type C appears already in the early seventh century deposit in 27–0 (*Antioch* iv.i 57—latest coins: Phocas), and continues to be present in the later seventh-century groups. Here no satisfactory evidence was found for the date of the introduction of the earlier types; the date suggested by Waagé (middle of sixth century) appears, on the basis of the evidence cited above, to be a little too early. Form 10, in all its main varieties, is well represented in the latest levels at Tocra and other Cyrenaican sites, which span roughly the first half of the seventh century. The latest dated examples of the form are several from the Byzantine fort at Emporio, for which a closing date of *c.* 660 is provided by the coin evidence; **14–15** come from here. It is likely that production ceased soon afterwards.

[1] It was originally published as 'fourth–fifth century', but this is clearly out of the question.

Suggested dates: c. 570–660+.

Types A–B—late sixth–early seventh century.
Type C —early–mid seventh century.

STAMPED DECORATION

Stamped decoration is present on most of the larger vessels of this ware.[1] It appears very early in the series, and continues to be employed regularly until about the middle of the sixth century; thereafter its use declines, until it disappears around or just before 600. Almost every normal-sized and large example of Form 2 and Form 3 would appear to have been so decorated; in contrast, the late Form 10 is usually plain.

Both in their arrangement and in the choice of motifs a close similarity with the African R.S. Ware stamped series is evident, at any rate in the earlier examples. As on the African products, the stamps are confined to the floor of the vessel, taking the form of one or more bands of repeated motifs, or, frequently, a single motif occupying the centre of the floor. They are frequently surrounded or enclosed by grooves or rouletting. On the basis of the composition a threefold division of the series is possible.

Group I The earliest scheme: palm-branches arranged in radial patterns, combined with a number of smaller subsidiary motifs, forming one or two concentric bands; each band is surrounded by a shallow groove. Cf. African R.S. Ware Style A. Form 2 appears to be the standard vessel-form. The range of motifs is restricted (see Motifs **1–5** below).

Group II Small animals and floral motifs, used singly or repeated several times, combined with rouletting and/or grooves. Crosses also appear (see Motifs **69–71** below). The individual motifs are quite different from those of Group I; some have close links with African R.S. Ware Style D. The various bands of decoration tend to be composed of a single motif, repeated as necessary; two motifs rarely appear side by side. There are two common arrangements:

A one or more concentric bands of stamped decoration alternating with two or three bands of multiple rouletting, sometimes with a stamped cross at the centre.

B one or two bands of motifs round floor, surrounded by grooves (rather as in Group I, but with different motifs).

To these may be added a third scheme, far less common:

C single stamp at centre, surrounded by several grooves.

These schemes are normal on the earlier varieties of Form 3 (Types A–C).

Group III A single stamp at the centre (occasionally more); no grooves or other decoration. A wide range of motifs: crosses and cross-monograms are the commonest, followed by animals and floral patterns; human figures appear occasionally. The stamps tend to be fairly large, and are sometimes quite elaborate. There is some

[1] It is very rarely found on the smaller pieces; for a possible example, see Form 3.8.

overlap with Group II: a number of the same motifs occur, though the Group III versions are normally rather larger in size. The normal vessel form is Form 3 (in Types C–H). The latest examples tend to be poorly impressed on an unsmoothed surface; a number of these occur on Form 10.

STAMP MOTIFS

'Palm-branch Style'. The stamp types characteristic of Group I above form a distinctive group having little in common with the later series; I propose the name 'Palm-branch Style' to cover them, after the principal motif. The common motifs—palm-branches, concentric circles and rosettes—are clearly copied from the African wares, where they had already been current for some time (the earliest *Late Roman C* examples may date from the 360s; see below). Their arrangement and the vessel form on which they most commonly appear also attest influence from the same source—one may fairly say that Form 2 with its stamped decoration is a deliberate copy (if somewhat simplified) of contemporary African stamped wares. The earlier stamps in the series (e.g. FIG. 72 a–b) are fairly neat and small (cf. African R.S. Style A (ii)), whereas the later ones become larger and more sprawling (see FIG. 72 h–j); a similar development has already been noted in the African products (Style A (iii)).

Floral and geometric (*later styles*). The new motifs found in Group II are far more varied. Some, like the palmette-pattern (**8**), have parallels in Style D of the African wares, indicating the source of the new small and linear motifs, though many seem to be peculiar to this ware. However, the appearance of one or two of the latter in the Gaulish T.S. grise (cf. Motif **18** below with Rigoir nos. 213–16), is suggestive of an African source for more of the motifs than is at present proved.[1]

Most of the stamps of this series are of mid–late fifth-century date. The general development appears to be in the direction of greater elaboration: e.g. compare Motifs **8** and **16** (Group II) with **10** and **17** (Group III). Motifs **33–34** should perhaps be regarded as variants of the cross-motif; **33**, it may be noted, occurs frequently in architectural carving of the period.

Animals. These are the commonest and most distinctive motifs in Group II; they continue to be popular well into the sixth century. The earlier examples tend to be small and stylized in a childish manner—often a mere outline with a small circle added to indicate the eye, and a spiral hook for the tail. Again the source for these motifs seems to be Africa, though they appear to be much more popular in *Late Roman C* than in African R.S. Ware, and some of the types may be new. A few early Group III stamps are similarly stylized, though they tend to be a little larger. By the early sixth century, however, the normal animal-types are both larger and more detailed, with linear or dotted ornament added on the body to produce a rather more naturalistic effect. Motifs **40** and **45** (piece **n**) may be classed as forerunners of this new style, which is probably a purely independent development.

Hares or dogs (perhaps both—they are not readily distinguishable) are by far the most commonly represented species in Group II; stags and felines (to be distinguished

[1] It is hardly likely that LRC and T.S. grise could have influenced each other directly, in view of their known distribution patterns (see below); a common African source may therefore be postulated.

from the preceding only by their antlers and manes) and small chick-like birds also occur with some frequency. The emphasis, as in the case of the rather earlier African appliqué-decorated series, seems to be primarily on hunting motifs, with the addition of one or two stock types such as dolphins (Motif **44**, etc.). In the later series stags and equines attest a continuing interest in this subject, while the various bird-motifs (peacocks, etc.) impart a more strongly Christian flavour.

Human figures. These are relatively uncommon; examples appear to be confined to the earlier phases of Group III (late fifth to early sixth century). The renderings are mostly very crude, with facial features, fingers and toes roughly indicated. In some cases the motifs are similar to ones found on the African wares, but they may not be directly connected—the *Late Roman C* examples appear on the whole to be earlier. Motif **58**—the only purely Christian one—may be an exception. **52** is identified by his spear as a hunter or *venator* (cf. those on the African rectangular dishes of Form 56); **54–55**, to judge by their attributes, may depict Bacchus, **56** could be an Imperial figure. These almost always appear by themselves; large figured scenes such as appear on the sixth-century African dishes are absent, and there is no evidence of African influence at this stage.

Canthari. Several examples occur on pieces of Groups II–III. The motif may initially have been borrowed from the African wares, but the rendering is quite different. The typical *Late Roman C* cantharus has its upper part stylized in the form of a lotus-bud. In the later examples the upper and lower parts separate, reducing the motif to a mere decorative pattern.

Crosses and cross-monograms. These are very common, particularly in Group III. The cross-motif survives later than any other; a few poorly stamped examples are present on late sixth-century products. African influence may be detected in some early examples, but in the choice of types Eastern fashions are normally followed, as might be expected.

Stylistically the earliest are the cross-monograms Motifs **61–62**, which may be classed as transitional Group I/II, since they occur together with early motifs or on vessels of early shape. One (**61**) has a closed *rho* of Western type, and may be a straight copy of an early African R.S. cross-monogram motif; in one case it is used in conjunction with a standard Group I motif. The other occurs on the early Form 2; here the normal open *rho* is found. These pieces may date from the second quarter of the fifth century. The earliest crosses are of the Greek type, mostly of a double-ribbed variety with splayed ends (Motifs **69–70**); these find no parallels among the African wares. They are fairly common on pieces of Group II, and appear to have been introduced around or shortly after the middle of the fifth century.

In Group III several varieties of crosses are present. A common type with a double outline may be derived from African R.S. Ware (Type 311), but the rest are more or less peculiar to this fabric. These are often decorated with two or four small circular or drop-shaped motifs set in the angles between the arms (a feature already found in Group II). Crosses with flaring arms (e.g. **79**, example **p**) tend to be early; straight-armed types, some with serifs at the tips, are favoured around A.D. 500 (cf. Motif **68**); on later sixth-century pieces the ends are widely splayed

(e.g. **79**, example **r**). The cross-monograms of this period exhibit similar features; a few of these also have pendent A and ω motifs. The jewelled varieties of cross favoured in North Africa are here rare; a simple outline rendering is normal. The *rho* of the cross-monograms is invariably of the open form normal in the East. In most cases these stamps are used singly, but in a few instances one finds three crosses stamped side by side (presumably a direct reference to the Crucifixion). The size of the stamps remains more or less constant throughout; the increase in size found in the contemporary African series finds no parallel here.

DATING-EVIDENCE

The dating-evidence for the more complete stamped vessels has already been given in the Type Series above; further evidence for the stamped series is provided by fragments from the deposits already noted.

Several fragments with decoration in the 'Palm-branch Style' (Group I) are present in the deposits in the Athenian Agora dating from the years around A.D. 400, alongside more numerous African fragments with similar decoration. Pieces shown on FIG. 72 b–f, Motif 1 of the Catalogue below, are from these deposits.

In the levels of *c.* 460–75 in the Agora almost all the stamped pieces are of Group II, representing all its main varieties, The following Motifs are present (with FIG. references in parentheses): 7(73d), 8(73g), 12(73m), 13(73q,r), 16(73t,u), 17(73w), 19(73y), 26(74c), 34(74j), 35(74n,o, 75a,d), 38(75l), 39(75q), 41(76a,d), 46(77b), 47(77e), 59(78a), 70(78r,s); also the human figures 53(77j) and 57(77n), perhaps early examples of Group III. A Group I piece, Motif 1(72h), from the same context, is perhaps to be classed as late in its series.

From the near-contemporary Agora Deposit D 6:1 come a number of similar stamps (including Motif 35(75c)), together with two early examples of crosses of Group III types (Motifs 71(79b) and 79(79p)). A few stamped fragments of Group III, including animal stamps and crosses (Motifs 71 and 67(?)), are present in the late fifth- to early sixth-century Kom group at Abu Mena.

In sixth-century groups the stamped pieces found appear to be all of Group III (with the exception of survival-pieces). Crosses (and variants such as Motif 34) predominate, as has already been noted by Waagé in the case of the A.D. 526 deposit at Antioch.[1] Motifs 33(74i), 38(75o), 67(78l) and 80(79t), and examples of Motifs 17, 34 and 71 (as 79g) are present in Athens Agora Deposit O–Q 18–19, which may be dated to *c.* 530–50; similar stamps, including Motifs 10(73j), 41(76f), 79(79q) and examples of Motifs 17, 71 (normal) and 79 (as 79r), occur in a slightly later Agora group. Some of these may represent early sixth-century survival-pieces.

On the basis of this evidence, and that provided by the catalogued pieces above, I propose the following datings:

Group I	*c.* 360–450.
Group II	*c.* 440–490.
Group III	*c.* 470–580.

[1] *Antioch* iv.i 57.

CATALOGUE OF STAMPS

'Palm-branch Style' (Group I)

Motif

1 *Palm-branch.* The basic motif of Group I, used with the subsidiary motifs listed below. Normally several grouped round centre of floor, pointing outwards; occasionally in other arrangements. Mostly of oval shape, with a single central rib, as African R.S. Ware Stamp Type 3. Common. Examples:

FIG. 72a Corinth C–34–2063.
b = Form 2.1.
c Athens Agora P 7935. In outer zone, set radially.
d Athens Agora P 12297.
e Athens Agora P 27047.
f Athens Agora P 8048.
g Louvre, CA 1770, from Apollonia Pontica; Frel, *Bull. inst. arch. bulg.* xxiii (1960) 245, fig. 5, no. 27.
h Athens Agora P 2503.
i Corinth CP 896.
j Athens Agora, uncat. Almost triangular, with short stalk below (cf. African R.S. Types 9–10); double rib. Used pointing inwards. Probably late.

Variants of the motif of abnormal types are occasionally used together with rows of rough rouletting. They may be classed as Group I/IIA, and should be late (close to A.D. 450?). They appear not to be associated with other motifs.

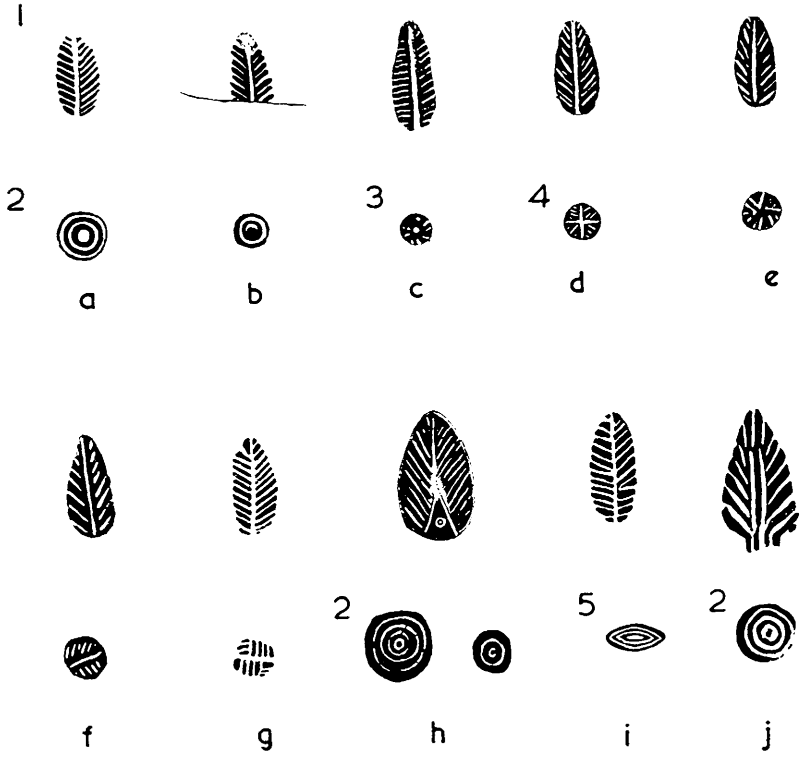


FIG. 72 Scale 2 : 3

Motif

Examples:

Popescu (1965) 698, fig. 1.3–4 (slightly heart-shaped, with downturned ribs); Sardis (unpublished; triangular with stalk below); Athens Agora P 27160 (triangular).

2 *Concentric circles.* Two to four circles, normally with a dot at the centre (unlike their counterparts in African R.S. Ware). Used either between tips of palm-branches or in an outer zone; sometimes also a single example at centre, from which the palm-branches radiate. The motif seems to persist until around the middle of the fifth century; it is used together with early animal and cross motifs (see Motifs 30, 36, 61), and also appears together with combed decoration on a very early piece of Group IIA (Athens Agora P 20653).

Examples:

see Motif 1, examples a, b, h, j, above. Also: Form 3.1.

3 *Small circular rosette.* Small and neat, with radiating 'spokes'; cf. African R.S. Ware, Type 44. Perhaps early (late fourth century). Used mostly as Motif 2.

Example:

see Motif 1, example c. Abnormal arrangement: four round centre, more between tips of palm-branches, which form an outer zone.

4 *Small circular motifs,* with linear decoration; one version resembles a shortened palm-motif. Used as Motif 2.

Examples:

see Motif 1, examples d–g.

5 *Small lentoid motif,* with triple outline.

One example:

see Motif 1, example i. One at centre, others between tips of palm-branches.

Further examples of Group I: Ugolini, *Albania Antica* iii (1942) 194, no. 77, fig. 199; *Antioch* iv.i 53–54, fig. 32 (below no. 1; two/three examples); *Tarsus* i 205, fig. 165 D; *Great Palace* i 63, pl. 27, fig. 9 c; Delougaz (1960) pl. 31.4; Aharoni, *Ramat Raḥel, 1959–60* fig. 18.13; further unpublished pieces from Corinth and the Athenian Agora.

Floral and geometric motifs (Groups II–III)

6 *'Star of David'.* Group IIA and B. Straight-sided and curvilinear varieties; no chronological distinction possible.

Examples:

FIG. 73a Athens Agora P 690.
b Athens Agora P 5670.
c Athens Agora P 4509.

7 *Leaf-shaped motif, with volutes.* Group IIA.

One example:

FIG. 73d Athens Agora, uncat.

8 *Palmette.* Three leaves, with two outward-facing volutes below; cf. African R.S. Ware Type 118. Group IIA and B. Not uncommon. On example f the stamps are arranged as in the Palm-Branch Style (Group I); the piece should be early. The stamp used for g appears to be an impression of that used for f.

Examples:

FIG. 73e Athens Agora P 17740 (used with Motif 46).
f = Form 4.1 (*q.v.*).
g Athens Agora P 2498.

Similar: *Antioch* iv.i fig. 32, bottom left; *Tarsus* i figs. 164 R, 165 F; Hellström, *Labraunda* ii.i 74, pl. 16, no. 330; one example from Kos (unpublished).

Seven-leaved version: *Antioch* iv.i fig. 32 (second down on left); *Materiali* 25, 126, fig. 161 = p. 320, fig. 14.5 (with Motif 69?).

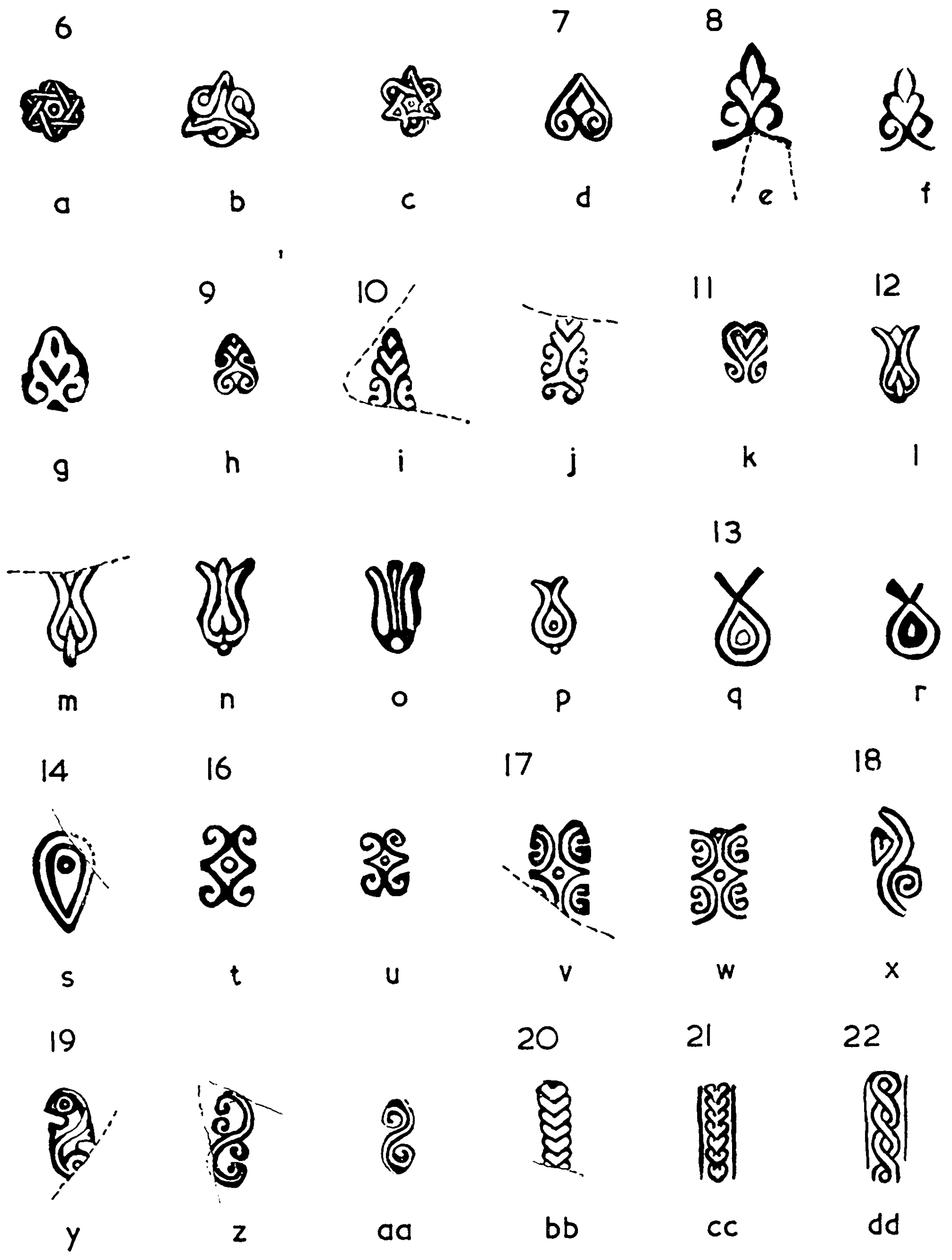


FIG. 73 Scale 2 : 3

Motif

9 *Palmette,* as **8**, with inward-facing volutes below (cf. **7**). Group IIB; probably later than **8**.
One example:
FIG. 73h Athens Agora P 10189.

10 *Palmette with volutes at sides and bottom.* Five-leaved, with three double volutes below. An elaboration of Motifs 8–9. Usually repeated four times round floor, without grooves or other motifs. Group III.
Examples:
FIG. 73i Athens Agora, uncat.
j = Form 3.29 (*q.v.*).

11 *Heart-shaped motif with two volutes below.* Group IIB; probably late.
One example:
FIG. 73k Athens Agora P 699.

12 *Lotus-bud.* Mostly tulip-shaped, with a slight stalk at base; several versions. Group IIA and B. The first example is early.
Examples:
FIG. 73l = Form 3.2 (*q.v.*).
m Athens Agora P 703.
n Athens Agora P 11104.
o Athens Agora P 19627.
p Athens Agora, uncat.
Similar: Corinth C-35-508.

13 *'Onion'.* Drop-shaped, with two projections above; inner lines following outline. Simplification of **12**. Group IIA and B.
Examples:
FIG. 73q = Form 3.5 (*q.v.*).
Similar: Waagé (1933) fig. 4, no. 237.
FIG. 73r Athens Agora P 3080 (with Motif 16).

14 *'Almond'.* As **13**, without projections. Group IIA and B; late?
Examples:
FIG. 73s Athens Agora, uncat.
Hellström, *Labraunda* ii.i 74, pl. 16, no. 329 (with Motif 71); Popescu (1965) 698, fig. 2.3–5.

15 *Seven-petalled rosette.* Apparently Group IIB.
One example: *Antioch* iv.i fig. 32 (to left of centre).

16 *Lozenge with volutes.* Two opposed double volutes, with small circle at centre; cf. African R.S. Ware, Type 102. Group II, A and B.
Examples:
FIG. 73t Athens Agora P 702.
u Athens Agora P 3080 (with Motif 13).

17 *Same, elaborated,* with four *pelta*-shaped motifs added at sides. Used as Motif 10, repeated round floor. Group IIB and III, probably early.
Examples:
FIG. 73v Athens Agora P 818.
w Athens Agora P 2131 (with Motif 34).
Also: Waagé (1933) fig. 4, no. 226; *Antioch* iv.i fig. 32, bottom centre; *Tarsus* i fig. 165 B,G.
Related: Maisler, *Eretz-Israel* i (1951) pl. XII.4, no. 7 (from Tell Qasile).

18 *S-motif, with ivy-leaf and tendril.* Double stem. Group IIA; probably early.
Examples:
FIG. 73x Athens Agora P 5437. Duplicate: Corinth C–34–2474.

19 *S-scroll.* Double stem; perhaps a derivative of **18**. Group IIA and B (late?) and Group III. The earlier version imitates a leaf-scroll or incorporates *pelta*-motifs; later this becomes a simple S-motif.

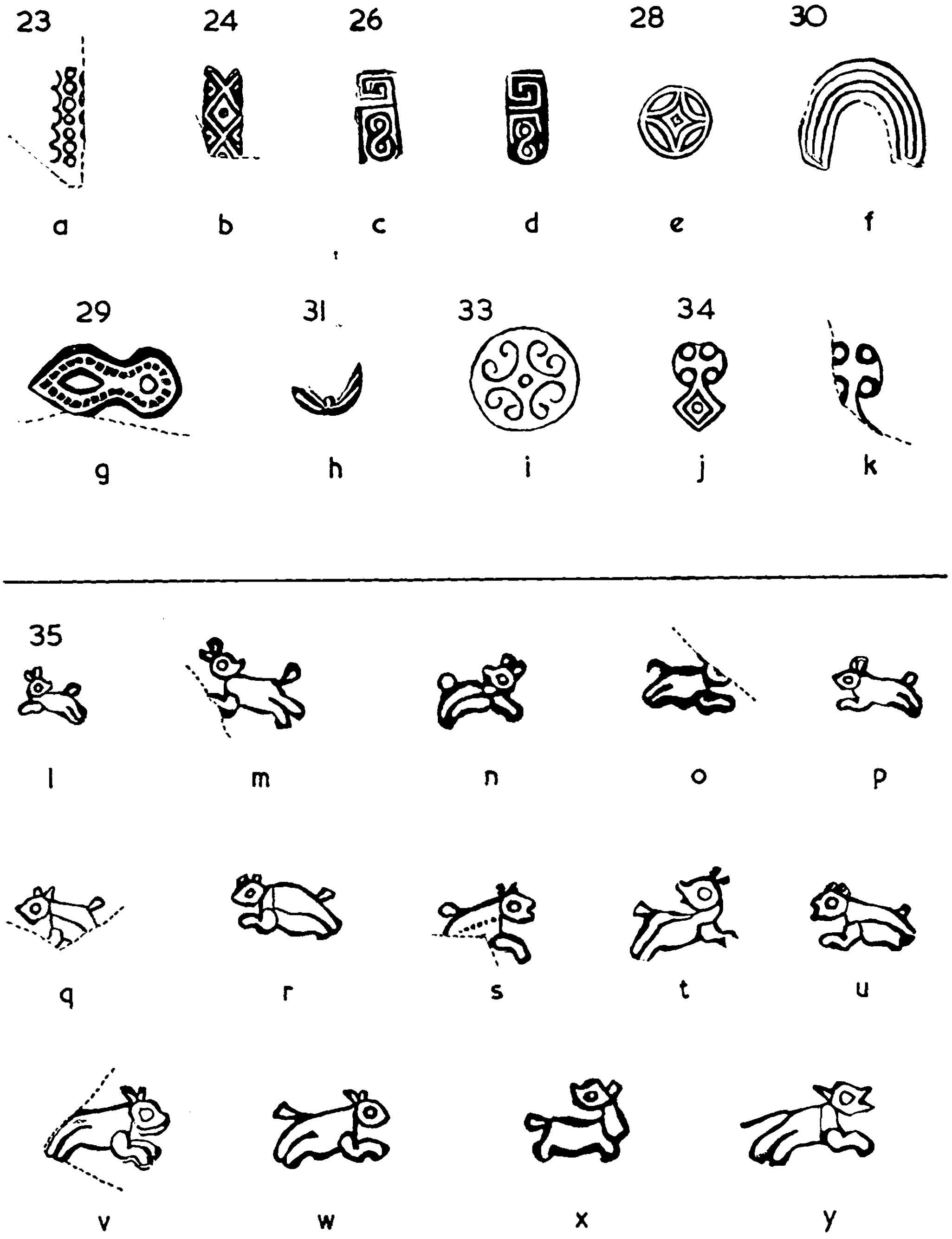


FIG. 74 Scale 2 : 3

Motif

Examples:

FIG. 73y Athens Agora, uncat. Group IIA.

z Athens Agora, uncat. (with peltas; Group IIB?).

Similar: Popescu (1965) fig. 7.2 (Group IIB?).

FIG. 73aa Athens Agora, uncat. Group III; seven stamps radiating from centre.

Similar: Athens Agora P 27145 (Form 3E/F; three stamps).

Variant: *Antioch* iv.i fig. 32 (above bottom l.).

20 *Running-leaf motif.* Series of overlapping heart-shaped leaves. Group IIA, early. Used radially.

Examples:

FIG. 73bb Corfu, Roman Baths (with Motif 2).

Similar: Kos (unpublished).

21 *Running leaf-band between two lines.* Group IIA.

One example:

FIG. 73cc=Form 3.2 (*q.v.*).

22 *Cable-pattern between two lines.* Early version (Group IIA) very long and thin, with single-strand cable; later version (Group III, early?) shorter, with double-strand cable. Both used radially.

Examples:

Early version: Sardis (unpublished).

FIG. 73dd Athens Agora, uncat. Later version.

Related: *Antioch* iv.i fig. 32, centre.

23 *Row of circles between two rows of linked semicircles.* Date uncertain.

One example:

FIG. 74a Athens Agora, uncat.

24 *Linked lozenges and triangles.* Rectangular stamp, comprising a central lozenge with circle at centre, with triangles around. Date uncertain.

One example:

FIG. 74b Athens Agora, uncat.

25 *Interweave pattern.* Rectangular stamp; dots in the interstices. Related to the preceding Motifs. Group III?

One example: *Antioch* iv.i, fig. 32 (third from bottom on l.).

26 *Figure-of-eight and key pattern.* Rectangular stamp. Group IIB.

Two examples:

FIG. 74c Athens Agora, uncat. Same: Athens Agora P 176=Waagé (1933) fig. 4, no. 227.

d Louvre, uncat.

27 *Lozenge and key pattern.* A variant of the above. Group IIB.

One example: Popescu (1965) 698, fig. 2.1.

28 *Circles with inscribed arcs.* Small. Two circles with four inscribed double arcs and small lozenge at centre; cf. African R.S. Ware Type 87. Group IIA.

One example:

FIG. 74e Athens Agora, uncat.

Variant, with single circle, arcs and circle at centre: Popescu (1965) fig. 2.8.

29 *Sole of shoe.* Thick broken line following outline to indicate studs, enclosing a lentoid motif and a circle. Heavy details. Group IIB.

Examples:

FIG. 74g Athens Agora P 5436 (with Motifs 38, 40).

Antioch iv.i, fig. 32, above bottom r.

30 *Horseshoe.* Composed of several lines, one outside another. Group IIA; early.

One example:

FIG. 74f Athens Agora, uncat. (with Motif 2).

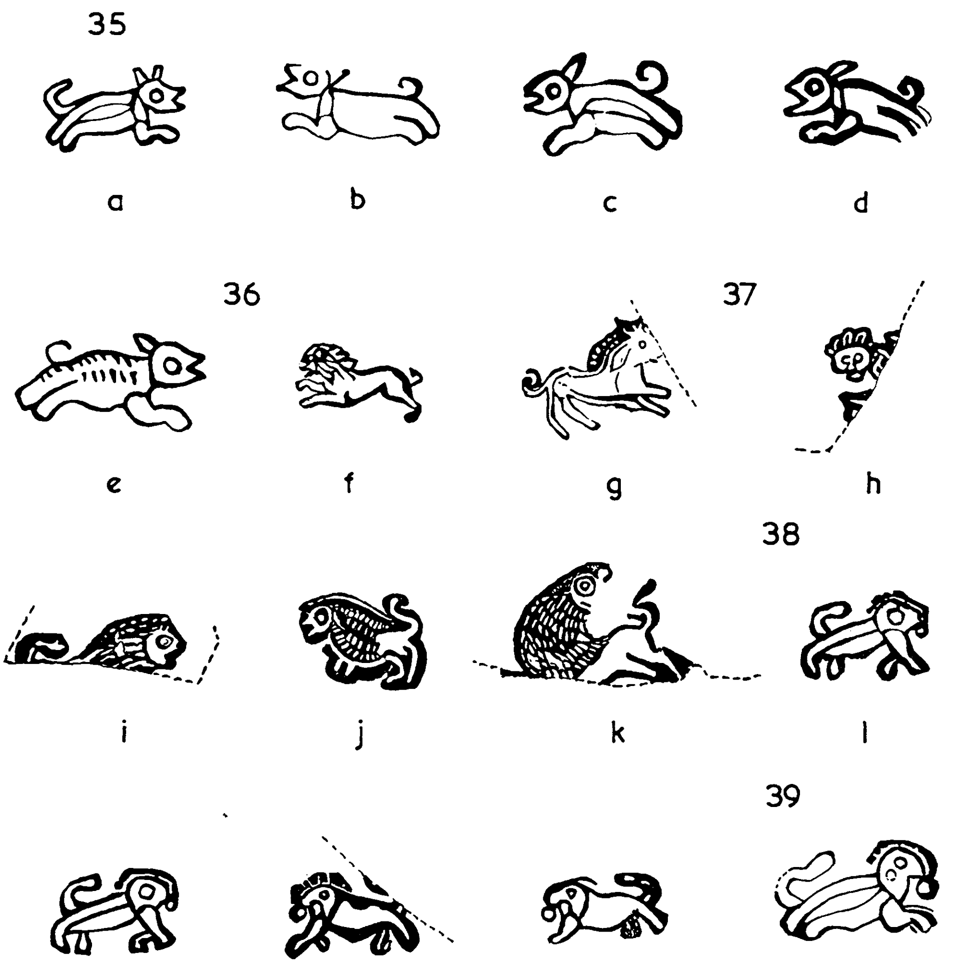


FIG. 75 Scale 2 : 3

Motif

31 *Two-leaf motif.* Line down centre of each. Group I (late) or II (early). Possibly part of a palm-branch, poorly impressed.
One example:
FIG. 74h Corinth C–34–2329 (with Motif 2 ?, 3 ?).

32 *Quatrefoil,* with multiple outlines. Group III. Perhaps to be classed as a variant of the crosses below.
One example: *Antioch* iv.i, fig. 34, top, second from l. (used at centre; interior surface rough).

33 *Four double volutes in circle,* forming a cross-pattern; small circle at centre. Group III; used as central motif.
Examples:
FIG. 74i = Form 3.28 (*q.v.*).
Delougaz, *Khirbat al-Karak* pl. 31.1 is similar, with two outer circles; the ware is uncertain, and could well be African R.S. (cf. Type 64 in that ware).

34 *Cross on lozenge.* Four circles, linked round outside to define a crude cross, set upon a base consisting of a lozenge with double outline and small circle at centre. Group IIA and B, continuing into Group III. Used at centre or round floor, alone or with other motifs.
Examples:
FIG. 74j Athens Agora P 2131 (with Motif 17).
k Athens Agora, uncat.
Similar: *Antioch* iv.i fig. 34, top l.
Variant: Popescu (1965) fig. 11.6 (with small *rho* incorporated?).

Animals (Groups II–III)

35 *Hare.* Mostly Group II; some may be classed as early Group III. Very common. A wide range of closely related stamp types, all simple and very stylized, with little more than the outline and the eye indicated. Some are clearly hares or rabbits, but others may be intended to be hounds or the like. All are represented running, with both hind legs showing. The earlier stamps in the series tend to be small, with the tail rendered in outline; the head is often turned. The later ones (continuing into Group III) are generally rather larger, with a single curl for the tail and an open mouth. The motif appears to have died out around 500, for the more elaborate body-detail characteristic of the sixth-century animal stamps does not occur.
Examples:
FIG. 74l–o Athens Agora P 569, P 492a, two uncat.
p–t Athens Agora P 817, P 167,[1] P 20574, P 6625, P 700.
u–v Athens Agora P 7031, P 5051. l–v=Group II.
w Athens Agora P 8011 (Group III; early).
x Corinth C–31–116.
74y–75a,b Athens Agora P 1124, uncat., P 2999 (Group II, late).
75c,d Athens Agora P 8645, P 1876 (Group III; c=Form 3B; two stamps at centre).
e = Form 3.6 (*q.v.*).
Similar: Form 3.12. *Syria* xxi (1940) 188, fig. 2.3 (with Motif 41); *Antioch* iv.i fig. 33 (several examples); *Tarsus* i fig. 165 I (with Cantharus, Motif 59); Popescu (1965) fig. 4.4,7,9, fig. 5.1,8, and perhaps fig. 5.4; Fitzgerald, *Beth-Shan* iii pl. XXXIV (bottom); Jerusalem ('Dominus Flevit'; unpublished); Corinth C–34–102.
Late version, unusually elaborate: Delougaz, *Khirbat al-Karak* pl. 61.6 (for rendering, cf. **41**).
As FIG. 74r: Louvre, uncat. fr. As FIG 75b: Louvre CA 1355, from Clazomenae.

36 *Lion,* early type. Small, running l.; eye and mane indicated. Group IIA, early.
Examples (same stamp-type):
FIG. 75f = Form 3.2.
Form 3.3; *Materiali* 69, p. 236, fig. 107 from Tiritaka; at least two examples from Sardis excavations (unpublished); Athens Agora P 695.

[1] Waagé (1933) fig. 4, no. 229.

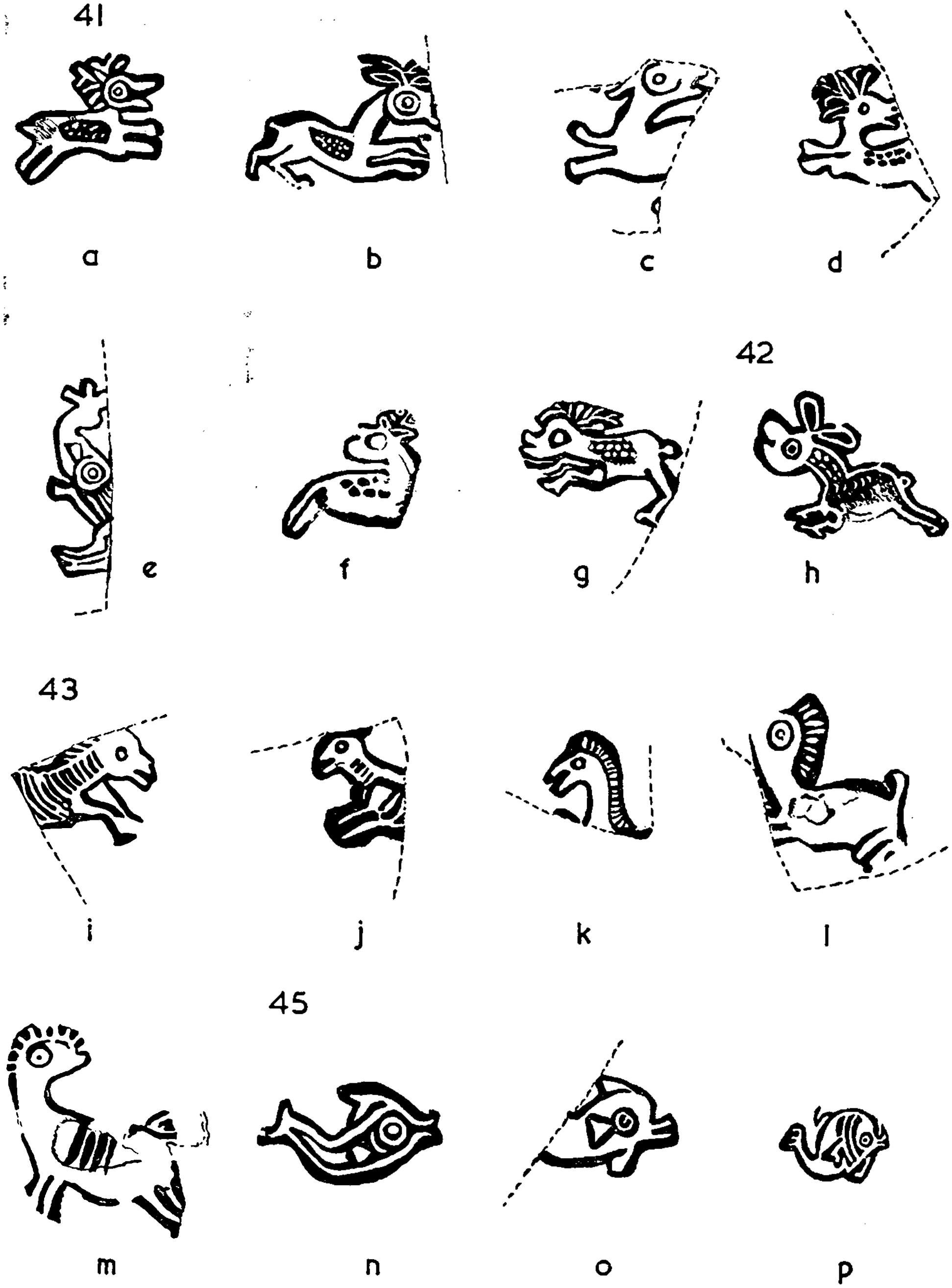


FIG. 76 Scale 2 : 3

Moti.

Variant?:

FIG. 75g Athens Agora P 24231 (with Motif 2). Group I/II B.

37 *Lion.* Later versions; larger, with more body-details. Mostly Group III. Generally leaping or running; in some cases very stylized. The long curved tail serves to distinguish this from the other animal motifs of Group III. Large stamps such as k below are probably the latest in the series.

Examples:

FIG. 75h Athens Agora P 503.
i Athens Agora, uncat.
j Apollonia (Cyrenaica), Byzantine Palace.
k Athens Agora P 24233.
Similar: Delougaz, *Khirbat al-Karak* pl. 31.11=pl. 61.3.

Others: *Antioch* iv.i fig. 33, bottom l. (two); Aharoni, *Ramat Raḥel, 1959–60,* 89, pl. 26.2 (=*ILN,* 17 Dec. 1960, p. 1098, fig. 15).

Variant: small lion pacing r.; style similar to Motif 38. Group IIA.

Examples: Popescu (1965) fig. 4.2–3.

38 '*Lioness*', pacing. Identification uncertain; rendering similar to Motif 35, with a short mane-like feature on top of head, and a globule hanging from jaws (which are not indicated). The second foreleg is sometimes rendered as a small feature projecting behind the nearer one. Groups II A, B and III (early); mid–late fifth century, as Motif 35. Several different stamps.

Examples:

FIG. 75l Athens Agora P 701. Group II.
m Athens Agora P 3603. Group III.
n Athens Agora P 5436 (with Motifs 29, 40).
o Athens Agora P 19628. Group III.

Others: Form 3.4. Jodin and Ponsich (1960) 305, fig. 14 c, pl. III (from Lixus); *Nessana* i pl. LIX B 1; Popescu (1965) fig. 4.5.

39 '*Lioness*', running. Similar style. Group III, early.

Examples:

FIG. 75p = Form 3.15 (*q.v.*).
q Athens Agora, uncat.

40 *Stag,* early type. Rendering as Motif 35, distinguished by addition of antlers. Group II.

Examples:

FIG. 75r Athens Agora P 4158.
s Athens Agora, uncat. Identification not certain. Group **IIB**.
t Athens Agora P 5436 (with Motifs 29, 38).

Similar: Popescu (1965) fig. 4.8; further examples from Sardis.

41 *Stag,* later versions. Larger; normally an area with large dots on the body. Represented running, in various poses; the head is sometimes turned. Mainly Group III. Fairly common. Several stamps; the later ones (e.g. examples d, g) attempt a more naturalistic rendering.

Examples:

FIG. 76a = Form 3.9. Close to **40**; note highly stylized rendering of head and legs. Group IIC.
b Apollonia, Cyrenaica, Byzantine Palace.
c Athens Agora P 6624. Head turned.
d Athens Agora P 2044. Head turned.
e Athens Agora P 5664. Head turned.
f = Form 3.23. Head turned.
g Athens Agora P 7683.

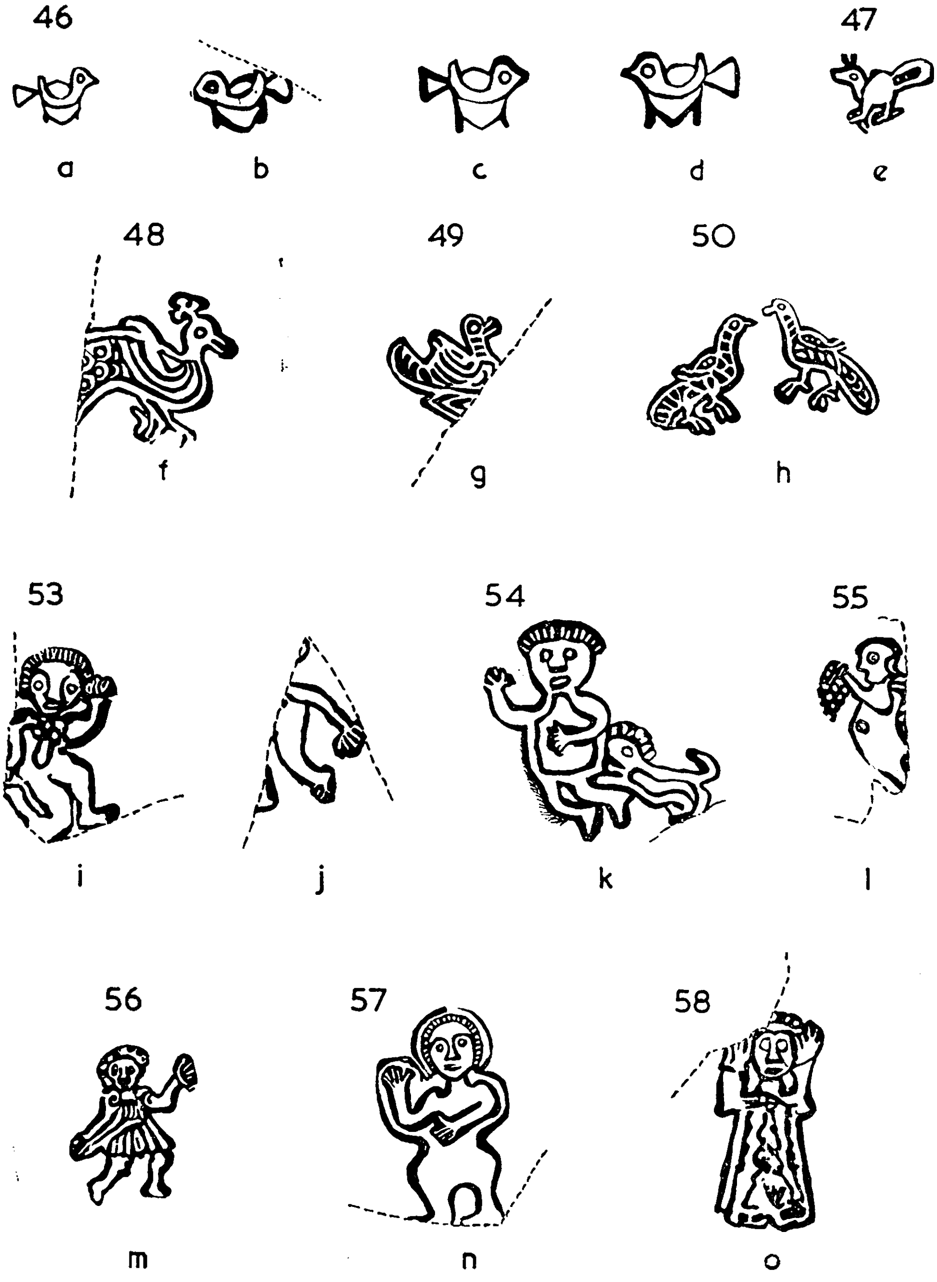


FIG. 77 Scale 2 : 3

Motif

Similar: *Syria* xxi (1940) 188, fig. 2.3 (Group II, A, with Motif 35); *Bull. Israel Expl. Soc.* xix (1955) 160, pl. VII, 3 (top left); Saller, *Excavations at Bethany* (*1949–53*) 257–9, fig. 49.1 (from Bethel); Kantor (1958) 35, pl. 32, nos. 66, 67; also Jerusalem, 'Dominus Flevit' (unpublished).

42 *Doe*(?). Large, with dotting all over the body; large ears; represented running. Group III.
FIG. 76h Athens Agora, uncat.

43 *Horse/mule/zebra.* Stamps large, mostly poorly rendered, making a definite identification impossible. Most seem to have some sort of mane, and may be presumed to be equine. One example has bars across the body; it could be meant as a zebra (see example i). Group III; the poorer stamps should be the latest (about second quarter of sixth century). A fairly large and diverse series.
Examples:
FIG. 76i Athens Agora P 736. Zebra?
j Athens Agora uncat.
k Athens Agora P 17739. Head of horse.
l Athens Agora P 1604.
m= Form 3.18. Large and crude, with prominent ribs.
Same: *Antioch* iv. i fig. 33 top r.
Others: Fitzgerald, *Beth-Shan* iii pl. XXXIV, bottom; *Antioch* iv.i fig. 33, bottom (two? examples); Popescu (1965) fig. 5.2.

44 *Dolphin,* early type. Small, in simple outline, with eye shown (cf. rendering of Motif 35). Group II, ? B, early.
One example:
Popescu (1965) fig. 7.1 (five stamps round centre).

45 *Dolphin,* later versions. Larger and more detailed. Groups II–III.
Examples:
FIG. 76n Athens Agora P 10636. Group II, C. Highly stylized rendering; cf. that of Motif 41, example a.
o Athens Agora P 169 (=Waagé (1933) fig. 4, no. 235). Group III.
p Corinth C-65-191. Group III.
Others: *Antioch* iv.i fig. 33 top (possibly two examples); Saller, *Excavations at Bethany* (*1949–53*) 261, no. 3229, fig. 49, pl. CXX b, 3; Popescu (1965) fig. 5.3.

46 *'Chick'.* Small and very stylized (cf. Motif 35); one standard type. Group II.
Examples:
FIG. 77a Athens Agora P 4136.
b Athens Agora, uncat.
c,d Athens Agora P 17740 (pair, flanking Motif 8).
Others: Popescu (1965) fig. 5.5–6; also Corinth C–37–2107.

47 *Peacock,* early type. Small and stylized (cf. **46**). Group IIA.
Examples:
FIG. 77e Athens Agora P 27067. A second Agora piece similar. With Motif 59 (*q.v.*).

48 *Peacock,* later type. Larger, more elaborate and naturalistic, with grooves for body-detail, and circle-motifs including tail-plumage. Group III.
Example:
FIG. 77f Athens Agora P 1540.
Also: Fitzgerald, *Beth-Shan* iii pl. XXXIV, bottom; *Antioch* iv.i fig. 33 (two examples?); Saller, *Excavations at Bethany* (*1949–53*) 261, no. 3321, fig. 49, pl. CXX b, 1; further examples from Corfu and Abu Mena.

49 *Partridge*(?). Plumage indicated by lines; bars across neck. Group III.
Example:
FIG. 77g Athens Agora P 5443.

Motif

50 *Long-tailed birds* (*peahens*?). Barred decoration. Group III, early.
Example:
FIG. 77h=Form 3.14. Pair to l. and r. (with slight differences).
Related types: Aharoni, *Ramat Raḥel, 1959–60,* 89, pl. 26.1 (=*ILN* 17 Dec. 1960, p. 1098, fig. 14).

51 *Bird.* Other types, fairly large, with a fair amount of body detail. Group III.
Example: Popescu (1965) fig. 6 (with turned head).

Human figures (all Group III)

52 *Venator with spear.* Rendered in outline only, without indication of clothing. Related to Motif 53, of which it is probably the predecessor.
One example: *AAnz,* 1909, 155, fig. 21, from Panticapaeum.

53 *Running figure.* Apparently naked, with one arm up, the other down.
Examples:
FIG. 77i Athens Agora P 7876.
j Athens Agora P 2509.
Also: *Antioch* iv.i fig. 33, bottom r.

54 *Man with animal,* perhaps Bacchus and panther. The animal is rendered in the early stylized manner. Probably late fifth century.
One example:
FIG. 77k Louvre CA 1098, from Smyrna region.

55 *Man holding bunch of grapes.* Naked, rendered in profile (to l.), holding up a bunch of grapes in l. hand. Bacchus?
One example (fragmentary):
FIG. 77l Athens Agora P 278.

56 *'Emperor', saluting.* A small figure clad in a tunic, apparently cuirassed. Moving to r., with weight on the l. foot; the l. arm is raised, the r. arm lowered. Perhaps a crude rendering of an Imperial figure, with arm raised in salute, though possibly meant to be running or dancing. The feature across the body could be a sword, in which case the figure might be a *venator* (cf. **52** above).
Examples:
FIG. 77m Athens Agora P 5050 (with missing parts added from other examples). In all, four specimens from the Agora excavations.

57 *Standing figure, saluting.* Body rendered in outline only. The r. arm is raised in a gesture of salute, the l. arm is bent across the body.
Example:
FIG. 77n Athens Agora P 2507.
Similar: Wampler, *Tell en-Naṣbeh* ii 186, pl. LXXIX, no. 1842.
In one instance a figure of this type is found associated with a cross (Athens Agora P 2508, fragmentary).

58 *Priest, in 'orans' position.* Standing figure, frontal, in long crudely rendered vestments, with both arms raised. Perhaps modelled on African R.S. Ware Type 232 and the like.
One example:
FIG. 77o Athens Agora P 166 (=Waagé (1933) fig. 4, no. 242).

Canthari (Groups II–III)

59 Earlier types; very stylized, with upper part rendered like a lotus-bud, small circles at sides to indicate handles, and splaying foot; in most cases an indication of fluting on the body. Groups II and III. The earlier examples (Group II) are clearly recognizable, and are sometimes used in compositions with peacocks (Motif 47) or other animals; in the later versions the original concept is lost.

Motif

Examples:

FIG. 78a Athens Agora P 27067 (with Motif 47). Group II A.
b Athens Agora P 4140. Group III.
c Athens Agora P 27131. Group III.

Also: *Tarsus* i fig. 165 I (Group II, B?, with Motif 35); Popescu (1965) 701, fig. 2.9 (Group II, A); Jerusalem ('Dominus Flevit', unpublished); *Antioch* iv.i fig. 32 bottom r. (late); Sardis (unpublished).

60 Late version, with top and bottom separated; the upper part is turned into a lotus motif above a pair of large volutes, while four tongues on a flaring base represent the original fluted body. Group III; early sixth century.

Example:

FIG. 78d Athens Agora P 14496.

Same: Corinth CP 1615, and Athens Agora P 5439.

Crosses and cross-monograms (Groups II–III)

61 *Cross-monogram with closed rho.* Double ribs, in relief; double-outlined *rho,* without tail. Cf. African R.S. Ware, Types 294–296.

Example:

FIG. 78e Louvre, uncat. *Rho* reversed. Central, surrounded by four circle-motifs (Motif 2); to be classed as a late example of Group I.

Similar: Emporio, Chios (unpublished).

FIG. 78f Cyprus Museum, Cyprus Survey site CS 1493. Normal *rho.* Several stamps round centre, alternating with small circles.

62 *Cross-monogram in relief, with open rho.* Straight arms, with small bars across ends, in relief (cf. **61**); reversed *rho,* with tail. Group I/II B.

Examples: Form 2.3 (*q.v.*); also Abu Mena 65.575 (similar arrangement).

63 *Cross-monogram,* rendered in simple outline, with open *rho.* Rather poorly rendered. Group III; probably not early.

Examples:

Schneider, *AthMitt.* liv (1929) 128, no. 6, fig. 20; *Antioch* iv.i fig. 34 bottom left.

64 *Cross-monogram with splaying ends.* Group III.

One example, on a base as Form 7.2: Popescu (1965) figs. 11.7, 12.

65 *Double-ribbed cross-monogram with* Α *and* ω. Cross of almost Greek type, with double ribs with splaying tips, the vertical member being continuous (cf. Motif 69 below). A small open *rho* attached to vertical arm, *alpha* (broken-barred) and *omega* under left and right arms respectively. Probably late fifth century.

Examples (all sherds):

FIG. 78g Athens Agora P 23250.

Popescu (1965) 710–712, fig. 13.1–2, from Istros; *Dacia* xi–xii (1945–47) 306, fig. 4.2.

These four fragmentary stamps belong to a single type; the *rho* is preserved on one only (Popescu, fig. 13.2).

66 *Cross-monogram with* Α *and* ω. Rendered in simple outline, sometimes with slight serifs at the extremities; open *rho.* Cf. Motif 63.

Example:

FIG. 78h Athens Agora P 3476 (late in series?).

Also: *Great Palace* i pl. 27, fig. 9 a; Dunand, *Fouilles de Byblos* i 23, fig. 10, no. 1084; Popescu (1965) fig. 13.5; *Materiali* 25, p. 126, fig. 160 (=p. 320, fig. 14.4), from Tiritaka.

67 *Cross-monogram with two pendants below arms.* Cross as **66**; *rho* has single or double outline. Two circular or drop-shaped motifs, each containing a circle, in angles between horizontal and vertical arms. Group III, late fifth–early sixth century. The commonest cross-monogram motif.

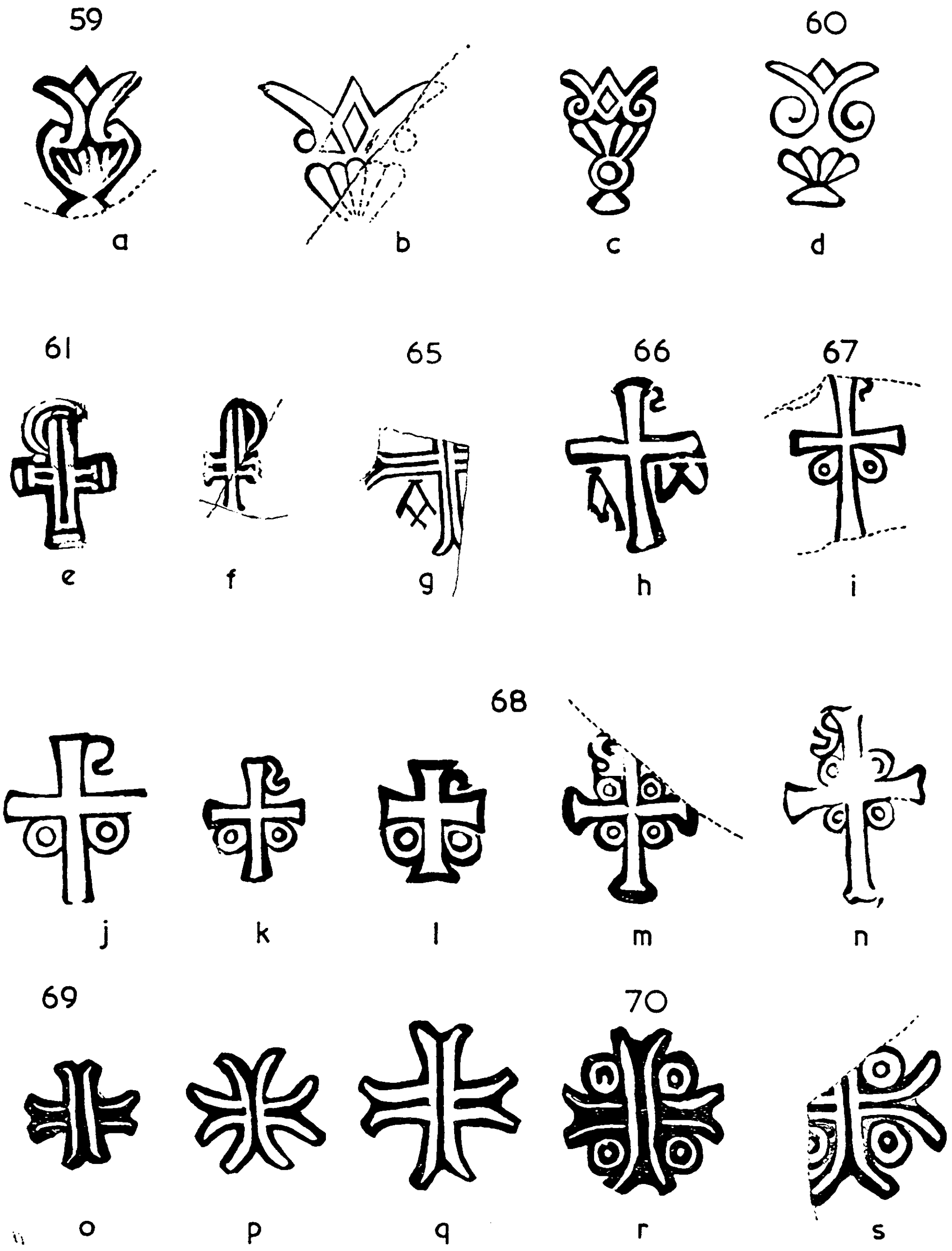


FIG. 78 Scale 2 : 3

Motif

Examples:

FIG. 78i Athens Agora P 3081 (perhaps early).
j Corinth C-28-77.
k Athens Agora P 689.

Others: *Antioch* iv.i fig. 34 (two examples); *Tarsus* i fig. 164 N; Popescu (1965) figs. 8.1–5, 9.2 (=Form 3F); Saller and Bagatti, *The Town of Nebo* 227, pl. LIII.1 (=Bagatti (1953) 73, no. 26); Bagatti, *Scavi di Nazaret* i 284–5, fig. 230.6=231.1=pl. V.1 left; Delougaz, *Khirbat al-Karak* pl. 31.5 (probably this type); *Great Palace* i pl. 27, fig. 9 e; *Nessana* i pl. LIX, C7 (probably this type); also Benaki Mus., Athens, 12442; Leiden I.10/4.35, from Crete; perhaps Abu Mena 66.1396.

A small variant with short broad arms occurs on three other pieces:

FIG. 78l = Form 7.2. Duplicates: Form 3.8 (*q.v.*); *Soundings at Tell Fakhariyah*, 35, pls. 32, 42, no. 68.

68 *Cross-monogram with four circle-motifs between arms.* Straight arms, with serifs at ends; small reversed *rho* with double outline; circle-motifs as on Motif 67, in all four angles. Group III, around A.D. 500.

Examples:

FIG. 78m Athens Agora P 192.
n = Form 3.16 (*q.v.*).

Also: *Antioch* iv.i fig. 34, above bottom r.; *Tarsus* i fig. 164 O.

69 *Double-ribbed Greek cross.* Vertical arm cuts off side arms; tips splayed. Group IIA (always as central motif in composition). Fairly common.

Examples:

FIG. 78o Athens Agora P 5438.
p Athens Agora P 14827.
q Athens Agora, uncat.

Also: Fitzgerald, *Beth-Shan* iii pl. XXXIV, bottom; *Antioch* iv.i fig. 34, top r.; *Materiali* 25, p. 126, fig. 161=p. 320, fig. 14.5 (with Motif 8; from Tiritaka); Popescu (1965) fig. 11.8–9; also Vienna, University Coll. 1065 (from Ephesus), Durham, Gulbenkian Museum 1964.452 (from Jerusalem), and Louvre CA 696.

Short variant?: *Tarsus* i fig. 165 C.

Small crudely stamped version (late?): *Antioch* iv.i fig. 34, second row, next to r. end.

70 *Double-ribbed Greek cross with pendants.* As **69**, with four double circle motifs between the arms (as on Motif 68). Group II, A; about third quarter of fifth century. A late version (see below) has square-ended arms; this should date from around A.D. 500.

Examples:

FIG. 78r = Form 3.5 (*q.v.*).
s Athens Agora, uncat.

Similar: *Antioch* iv.i fig. 34, next to top r.; also one example from Pergamon (Bergama Museum).

FIG. 79a Benaki Mus., Athens, 12441 (probably late).

Late square-ended type:

Form 3.21, *q.v.* Group III.

71 *Cross with double outline.* Normally with straight square-ended arms; a few variants have flaring arms. Mostly Group III, late fifth to early sixth century; some poorly impressed examples are later. Also occasionally Group IIA, C (late). The commonest type of cross on *Late Roman C.*

Examples—normal type:

FIG. 79b = Form 3.7, *q.v.* Early.
c Athens Agora P 3744.
d Athens Agora P 746. Similar: Corinth C–37–2211.
e = Form 6.1.

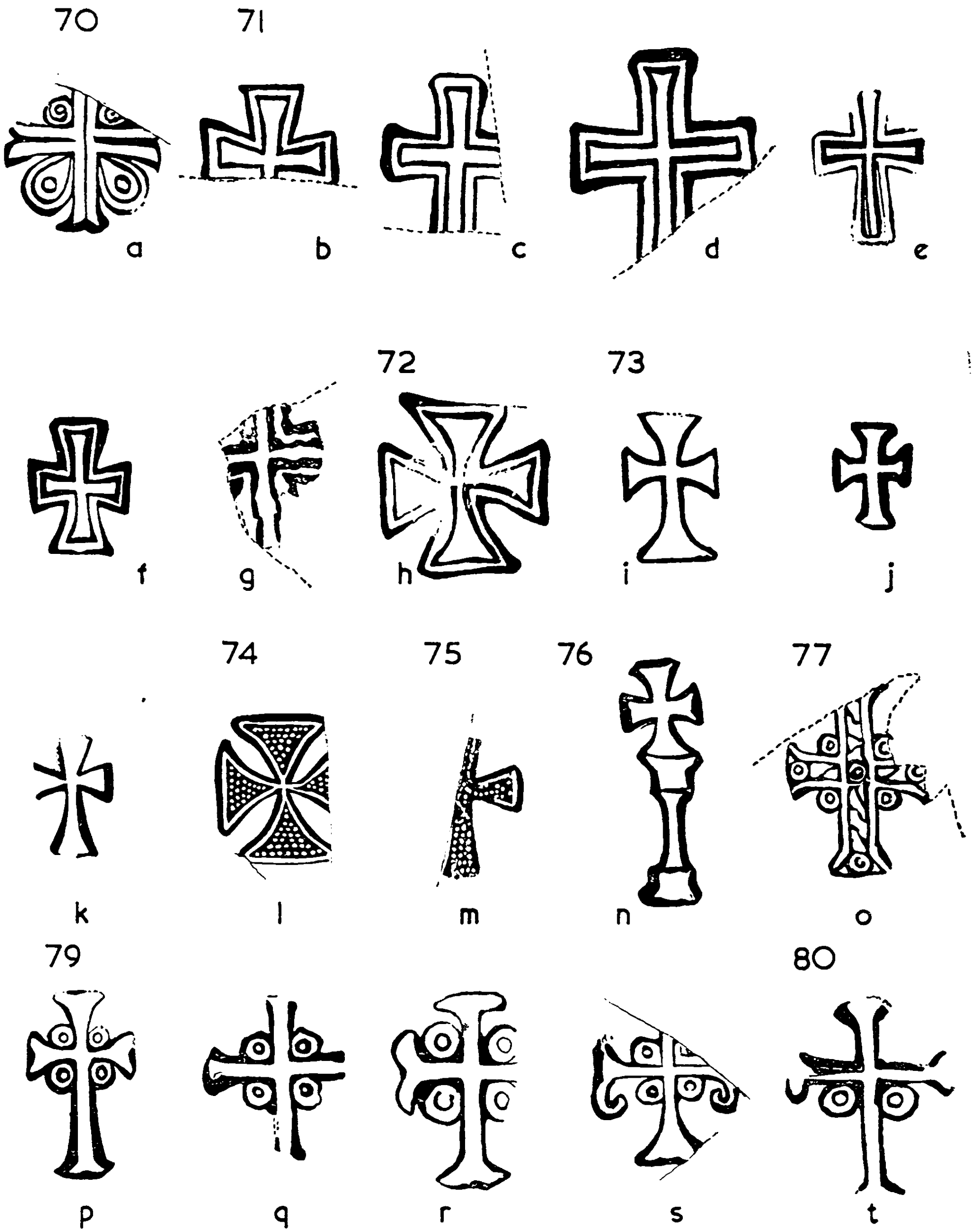


FIG. 79 Scale 2 : 3

Motif

Others: Wulff, *Altchristliche Bildwerke* 293, pl. LXX, no. 1561 (from Smyrna); Conze, *Altertümer von Pergamon* i. 2, 322, fig. 110; Lane, *Archaeologia* lxxxvii (1937) 27, fig. 14 L (from Al-Mina); *Materiali* 25, 126, fig. 160, left and centre=p. 320, fig. 14.1 (from Tiritaka); *Great Palace* i pl. 27, fig. 9 b; *Antioch* iv.i fig. 34, centre (two examples); *Tarsus* i fig. 164 P; Radford (1956) pl. VI, bottom centre (from Tintagel); Kantor (1958) 31, pl. 29, no. 19; *Nessana* i pl. LIX, C 1; *PAE*, 1963, pl. 138β, top left (from Naxos); Popescu (1965) 707, fig. 7.3–6; Bagatti, *Scavi di Nazaret* i fig. 236.27. Unpublished examples from Jerusalem ('Dominus Flevit'), Abu Mena (66.1398), Kos, Pergamon, the Athenian Agora and Corinth (C–38–65).

Similar, Group II:

FIG. 79f Corinth C–34–312.

Also: *Antioch* iv.i fig. 34, centre r.; Hellström, *Labraunda* ii.i 74, pl. 16, no. 329 (with Motif 14).

Variants with flaring arms: Form 3.27; also *Antioch* iv.i fig. 34, on left (two examples); Popescu (1965) fig. 13.8.

Small broad variant: *Antioch* iv.i fig. 34 centre.

Poorly impressed (mostly late):

FIG. 79g Athens Agora P 22799.

Form 3.24 (*q.v.*). Sellin and Watzinger, *Jericho* 163, C 1a, fig. 205; Sellers and Baramki, *BASOR* Suppl. Studies 15–16 (1953) fig. 29.8; *Tarsus* i fig. 164 L; *Materiali* 34, pp. 212–3, fig. 61 (from Chersonesos); *Bull. Israel Expl. Soc.* xix (1955) 160, pl. VII.3, bottom left (from Ramat Raḥel); Delougaz, *Khirbat al-Karak* pl. 31.6; *Soundings at Tell Fakhariyah* 30, pl. 29, no. 16; also Athens Agora (unpublished).

72 *Greek cross with double outline.* Mostly small, with flaring arms. Group III, and perhaps also II; perhaps late fifth century.

Example:

FIG. 79h Corinth C–65–199. Group III.

Also: *Antioch* iv.i fig. 34, near top r.; *NSc* 1954, 329–30, fig. 17.7 (from Syracuse). Possibly also one or two of the pieces listed under Motif 71.

73 *Plain cross.* Some examples have flaring arms, others have splayed extremities; the latest are poorly impressed. Group III, late fifth to late sixth century. Used singly, or in groups of three, side by side.

Examples:

FIG. 79i = Form 3.10. Early, with flaring arms.

j Athens Agora P 218.

k Apollonia, Cyrenaica, Byzantine Palace. Three stamps.

Also: *Antioch* iv.i fig. 34, second row, centre, and second down on right (large, with splayed tips); Bagatti (1953) 73, nos. 21–22; *Athenian Agora* v M 351, pl. 36 (this type?); Popescu (1965) fig. 13.3–4.

Late: Form 10.9, *q.v.*

74 *Greek cross with dotted decoration.* Group III?

One example:

FIG. 79l Louvre, uncat.

75 *Cross with dotted decoration.* Group III.

Example:

FIG. 79m Athens Agora, uncat.

Also: Popescu (1965), fig. 7.7 (rather different).

76 *Cross on a pedestal.* Group III.

One example:

FIG. 79n Athens Agora P 3600. Same stamp impressed three times, in a row.

Motif

77 *Jewelled cross with pendants.* Large, with splayed ends, each containing a double circle; double circle at centre, oblique lines on arms. Four circle-motifs in angles between arms (as on Motif 70). Group III; late fifth or early sixth century.
One example:
FIG. 79o Athens Agora P 8056.

78 *Cross with double outline and two pendants.* Rather broad flaring arms, with two small circle-motifs under side-arms. Group III?.
One example: Popescu (1965) fig. 13.7.

79 *Cross with four circle-motifs between arms.* Cf. Motif 68. Arms mostly straight, with splaying ends. Group III, late fifth to mid sixth century. Common. Some early examples are tall and narrow, with flaring arms (see example p); ones with broad splaying tips (as r) are late in the series. A few have drop-shaped pendants.
Example:
FIG. 79p Athens Agora P 8644. Form 3C. Early.
Similar: Popescu (1965) fig. 11.2–3.
FIG. 79q Athens Agora P 3540.
r = Form 3.25. Late.
s Corinth C-34-311. Late, with broad curled tips.
Also: *Antioch* iv.i fig. 34, row above bottom (two examples); *Great Palace* i pl. 27, fig. 9 d; Chehab, *Bull. Mus. Beyrouth* xiv (1958) 157, pl. CIII, 7; *Soundings at Tell Fakhariyah* 30, pl. 29, no. 15 (=Group II, C); Bagatti (1953) 73, no. 23; Popescu (1965) figs. 9.4 (drop-shaped pendants), 11.4–5(?); further examples from the Athenian Agora (including Waagé (1933) no. 239?).

80 *Cross with two pendants.* As **79**, with only two circle-motifs (cf. **67**). Group III, mostly first half of sixth century. Development similar to **79**; examples with wide-splaying ends are late.
Example:
FIG. 79t Athens Agora P 19637. Late version.
Also: Lane, *Archaeologia* lxxxvii (1937) 27, fig. 14 K (from Al-Mina); *Tarsus* i fig. 164 K?, M?, Q?; Bagatti (1953) 73, no. 25 (early); Popescu (1965) fig. 9.1; also Itanos, Crete (unpublished, in Knossos).

DISTRIBUTION

Late Roman C is the predominant fine ware in most regions of the eastern Mediterranean from about the middle of the fifth century onwards until the early years of the seventh. Its main competitor in these regions is Cypriot Red Slip Ware (see next chapter), which becomes popular at about the same time. These two wares virtually supplant the African products throughout the East for about a century, and retain their dominant position on the market even after the re-emergence of the African wares in the sixth century. *Late Roman C* is the commoner ware of the two in all regions except Cyprus, Lower Egypt and possibly some parts of southern Asia Minor. Its site distribution, ranging from Sicily (and occasionally further west) to Syria, and South Russia to Cyrenaica, indicates a sea-borne distribution of the ware, though in regions such as Syria and Palestine it travelled well inland; one may note that in Egypt it did not penetrate beyond the Delta region. In the East, it predominates on sites such as Antioch and Tarsus.[1] The main concentration of the ware is however in the Aegean area, with extensions to the north and south; here

[1] See Waagé (1948) 52, 56; *Tarsus* i, 205.

it occurs already in substantial quantities in contexts of the late fourth century. The finds from places such as Athens, Saloniki and Constantinople, and to a lesser extent Corfu and Emporio (Chios), indicate that here the ware had a near-monopoly of the fine-ware trade in the mid fifth–early sixth century, a situation not markedly altered by the reintroduction of the African wares in the mid sixth century. One may therefore assume that the ware was produced somewhere in this area.

RELATIONSHIP TO ÇANDARLI WARE

Certain factors suggest a connection between *Late Roman C* ware and the earlier Çandarli ware discussed above, indicating that the former may also emanate from the Pergamon region (or some district not too far distant from there). Though much influenced by North African styles, especially in matters of decoration, *Late Roman C* ware maintains something of an independent tradition, particularly noticeable in the choice of vessel-forms. This would tend to indicate that it had forerunners, and that, far from being a completely new creation, it represents the continuation of an earlier ware either made in or well known in the regions where it was manufactured.

A certain number of technical similarities point to a link with Çandarli ware, the longest-lived of the earlier Roman wares of the East, which, as has been shown above, was still being produced in the late third century, if not in the early fourth, less than a century before the emergence of *Late Roman C*. First and foremost, the two wares share one distinctive vessel-form (Çandarli (late series) Form 4, LRC Form 1A).[1] Secondly, the finish of both wares is similar. Admittedly, Çandarli ware, with its red-gloss surface, is in the *terra sigillata* category, whereas *Late Roman C* has merely a dull slip; yet on both wares the whole of the surface is coated with slip and the interior is much more carefully finished than the exterior, which regularly bears horizontal scratches. In addition, one may conjecture that the curious tapering foot of Çandarli Form 4 is the forerunner of the typical low hollowed bases of *Late Roman C* pieces. Finally, one may note that though the basic fabric of the two wares shows certain differences, some early pieces of *Late Roman C* (e.g. Form 1.3 and a number of frs. from Corinth) and a small group of later date (see under Form 3 H) exhibit characteristic features of the Çandarli fabric (gold mica flakes, glossy slip), suggesting a similar source.

One should perhaps also note that the main areas of distribution of *Late Roman C* (Aegean, Cyrenaica and Black Sea) correspond more or less with those of Çandarli ware, though the former was also widely exported elsewhere.

PROBABLE CENTRES OF PRODUCTION

The basic uniformity of the fabric has been noted above. This may be taken as an indication that the ware was produced in a single region, by a number of workshops with access to the same clay-beds. The exact source remains unknown, but a connection with the Pergamon region is indicated by the fabric. To this may be

[1] See discussion under Form 1 above (p. 326).

added the evidence from other sites in the Aegean region, where it is commonest. Despite its commonness at Athens, Corinth, Corfu and Saloniki it cannot be claimed as the local product of any of these places, on account either of differences of fabric or (as at Athens) the existence of a rival local stamped ware. The same appears to be true of all parts of Greece and the Aegean islands, and also of the Constantinople region. Most of Asia Minor is also ruled out: at Sardis, for instance, local imitations are in evidence, and further south the other Late Roman wares (especially Cypriot Red Slip Ware) are too well represented for one to imagine that *Late Roman C* was made there. This seems to narrow the probable area of production to the north-eastern Aegean or Dardanelles region. Unfortunately the evidence available from this area is minimal,[1] so one can only surmise where the workshops may have been. They could well have been located in the Pergamon region, as has been indicated above. A second possible source is the Çanakkale region on the Dardanelles, where in more recent times wares with a similar fine red fabric have been produced.[2] It may be no coincidence that the emergence of *Late Roman C* ware in the fourth century coincides more or less with the rise of Constantinople, which was unquestionably one of its major markets.

[1] The total loss of the finds from the upper levels of the Asklepieion at Pergamon (pre-war German excavations) is much to be regretted. A few pieces of the ware are recorded from Pergamon; recent finds in the Troad (survey work by J. M. Cook) indicate its presence there also.

[2] For Çanakkale ware, see A. Lane, *Later Islamic Pottery* 65–66. It is possible that some of the finer Byzantine sgraffito wares (e.g. Talbot Rice's class B 1) may also have been made there.

VII

CYPRIOT RED SLIP WARE
('Late Roman D')

A THIRD red slip ware common in Late Roman times in the East is that classified by Waagé in his Antioch publication as *Late (Roman) D* ware.[1] Its distinguishing characteristics are a fine-grained clay, heavy rather crude potting and rough irregular rouletted decoration. The exact source of the ware is unknown, but it was in all probability made somewhere in Cyprus, where examples are commonest. I propose therefore to name it *Cypriot Red Slip Ware*. In fabric it closely resembles the Early Roman ware which I have termed 'Cypriot Sigillata',[2] and though a direct link between the two wares is not established, it seems very likely that both were made in the same region. Its date-range is from about the end of the fourth century (possibly earlier) to around A.D. 700.

FABRIC

This is consistently very fine and smooth, with no grains visible, and breaks cleanly, even when ill-fired. The only obvious impurities are occasional lumps of lime, often quite large, which tend to rupture the surface. The presence of these proves that the clay does not owe its fine texture to careful levigation; it presumably comes from alluvial deposits. The degree of firing and colour of the fabric vary enormously, the latter ranging from near-yellow through various shades of orange, brown and red to a deep maroon, purple or sepia; a pinkish or maroon tint is commonest. The vessels appear to have normally been fired in stacks, one resting directly on top of another, since the rims are frequently discoloured (appearing blackened or creamy white). A thin slip coating is applied to the whole of the surface, as in the case of *Late Roman C* ware; exceptions are the large basins of Form 11 and the few closed shapes. This slip, which is of similar nature to the body-clay, and tends to merge with it, has a matt appearance on the more poorly fired pieces, but acquires a metallic lustre when hard-fired; it is generally a shade darker than the clay beneath. Some early pieces (notably Form 1) have a rather thicker slip with a fine lustrous appearance identical with that of the earlier 'Cypriot Sigillata' ware (see above); these constitute Waagé's *Late E* ware.[3] Otherwise the fabric remains remarkably consistent throughout its history, with the exception of a bad phase around the middle of the sixth century (see Form 2.12–13 below).

[1] *Antioch* iv.i 52. Not to be confused with the 'Late D' ware of his earlier Athenian Agora article (Waagé (1933) 304–308), which represents local Athenian products.

[2] J. W. Hayes, 'Cypriot Sigillata', *RDAC*, 1967, pp. 65–77, pl. XVI.

[3] *Antioch* iv.i 52.

Vessels are mostly rather thick-walled, and tend to have a poor finish. The insides are generally smoothed with some care, and often display fine parallel brush-lines; the outsides and feet, on the other hand, are roughly smoothed off with a finishing-tool, leaving slight irregular ridges or wheel-marks. Feet, normally low, are produced by hollowing out the underside. On the flat-based forms (Form 5 in particular, and sometimes Form 9) wire- or string-marks are sometimes visible on the undersides. It may be taken for granted that the vessels of this ware are all simple wheel-made products.

FORMS AND DECORATION

The basic vessel-forms are few, and are rather less standardized than those of the African wares, with one form shading off into another. Medium-sized dishes, in the earlier versions with low feet (Forms 1, 2), in the later ones flat-based (Form 9), are most popular; a parallel series of small bowls (Forms 3, 5) appears in smaller numbers. A third shape, produced in some quantity in the later stages, is a large basin, with or without handles (Forms 7, 10, 11), presumably intended for domestic use. Other shapes are rare. Within the main series some consistent development of form may be observed.

The standard decoration on this ware is coarse rouletting, in the form of either large strokes covering the whole of the wall or one or more narrow bands, often applied in an erratic fashion and interrupted by the ridges and hollows resulting from the careless turning. This appears first on Form 2, where it is clearly an attempt to copy the fine 'feather-rouletting' of African R.S. Forms 82–84, and persists with various modifications until the end of the series. In addition, rims are often grooved, and stamped decoration, with or without a grooved border, is employed on the floors of a number of dishes (see under Forms 2 and 9). A feature peculiar to this ware is the presence on the rims of many of the dishes (mostly late) of a single short incised wavy line—which could be termed the 'trade-mark' of the Cypriot workshops.[1]

CATALOGUE OF VESSEL TYPES

An asterisk indicates that the profile is drawn in a Figure

FORM 1

Antioch 928.

Dish with flat floor, sloping wall and plain thickened rim, rounded or bevelled on outside. Low foot, normally under edge of floor. Undecorated.
Size-range: D. (max.) *c.* 21–28. Not very common.

Examples:

*1 Abu Mena 65/516. Est. D. (max.) 26. Fragmentary. Carinated form, with small foot of relatively small diameter.

[1] It is copied, along with Cypriot forms, in late Egyptian wares (see pp. 400–1 below).

*2 Saloniki 488, from W. cemetery (Βαρδάρι). D. (max.) 23·5. Slightly carinated; broad chamfered foot; rough spiral groove under centre from turning. Fine fabric with rather glossy slip; outside of rim discoloured.

3 Abu Mena 65/514. Est. D. (max.) 21·0. Fragmentary. Form as **2**. Rim discoloured.

*4 Abu Mena 65/518. Fr.; est. D. (max.) 26. Wall rises almost direct from foot.

5 Antioch excavations; Waagé, *Antioch* iv.i 53, pl. X, shape 928. Est. D. (max.) 27. Fragmentary. Form as **4**. Grooves on underside from turning.

The order in which these pieces are listed may correspond to the chronological development of the form, with a carinated version being succeeded by more straight-walled ones. The evidence for this is, however, by no means clear. Nos. **1**, **3**, **4** and a number of similar frs. were found together in the Cistern group at Abu Mena, which may date from around 480; some of these frs. could be survival-pieces. For **2**, a date between the late fourth century and the mid fifth century seems suggested by the other finds from the cemetery in which it was discovered (cf. *Late Roman C* Form 1.2, Form 2.5–6, etc.). A fr. similar to **2** occurred in a group of *c.* 400 in the Athenian Agora (P 27054, from Agora Deposit U 22:1). At Antioch examples (as **5**?) occur together with *Late Roman C* etc. of late fifth-century shapes (see Waagé, p. 56). The Hierapetra piece Form 2.14 could be the successor of pieces such as **4–5**.

Suggested dates: late fourth century (or earlier) to about third quarter of fifth century.

FORM 2

Antioch 930 (f–k).

Dish corresponding to Form 84 in African R.S. Ware, with steep wall, bearing rouletting, and knobbed rim with grooves. Floor and foot as on Form 1. Sometimes stamped decoration on the floor, surrounded by grooves.
Size-range: mostly D. *c.* 22–29·5; small version D. 15·5–19. Common.

Examples:

*1 Abu Mena 65/512. Est. D. (max.) *c.* 27·6. Fragmentary. Rim bevelled on top, with two grooves; one line of long rouletting on wall, with two grooves below. Ends of a series of radiating palm-branches preserved on floor, surrounded by two grooves (FIG. 84 a).

*2 Athens Agora P 27051; Waagé (1933) 308, pl. X, no. 290. Est. D. 25·6. Fragmentary. Foot of medium height, thinner than usual. Three grooves preserved on floor, perhaps surrounding stamped decoration (lost) at centre.

3 Antioch excavations; Waagé, *Antioch* iv.i 53, fig. 35 top left, pl. X, shape 930f. D. (max.) *c.* 23·5. Shallower than **2**, with low foot. Decoration: five pomegranate stamps radiating from two grooves round centre, with five circle-motifs between; surrounded by two grooves.

4 Samaria G 24(e) + G 31 (=Palestine Mus., Jerusalem, 33.3283 + 3286); Crowfoot, *Samaria-Sebaste* iii 361, fig. 84, no. 27 (= the second piece only). Similar size and shape; profile preserved. Decoration: band of almond-shaped stamps and trefoils composed of double circles (cf. African R.S. Ware Types 133 and 84), alternating.

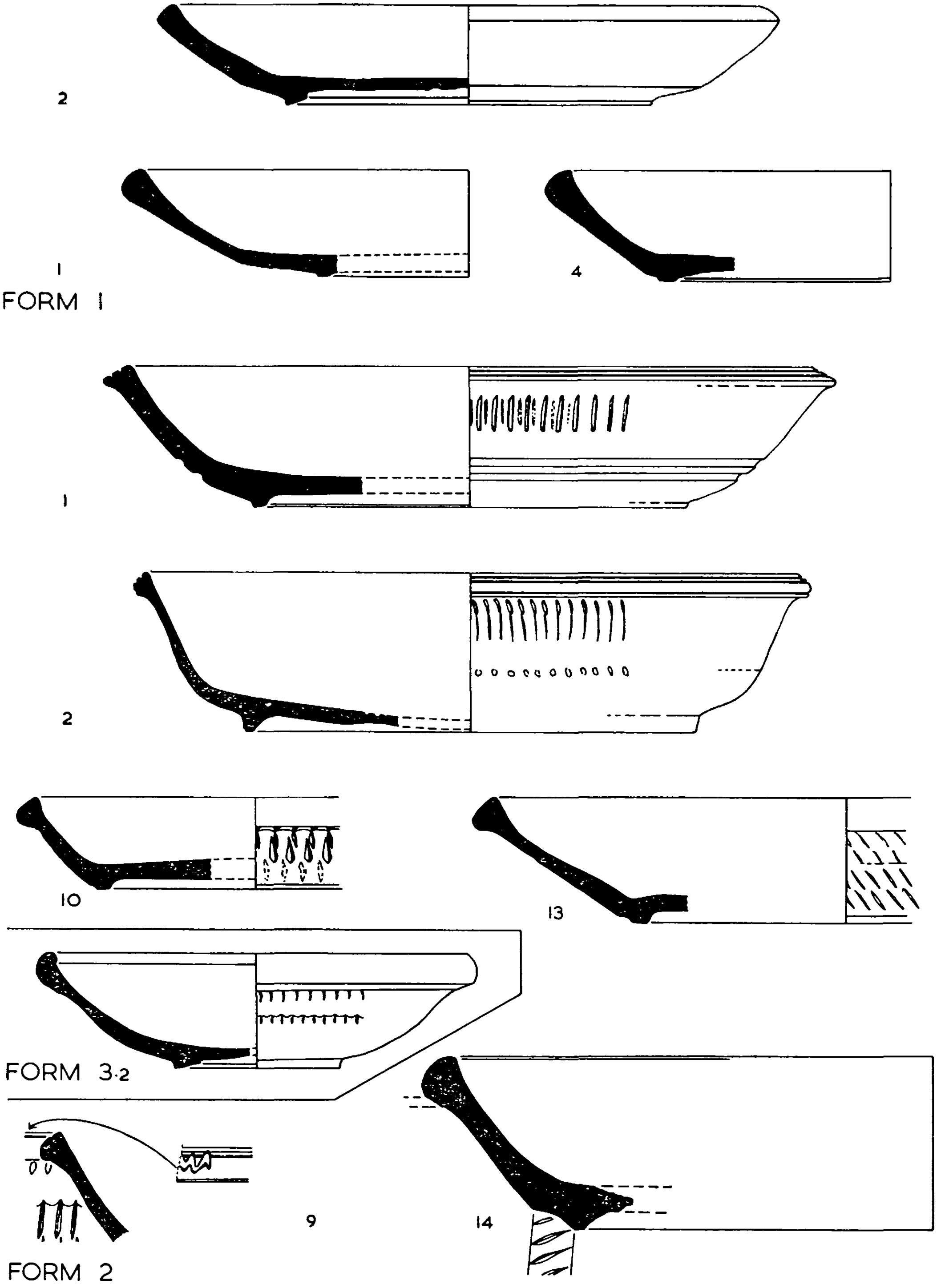


FIG. 80 Scale 2 : 5

5 Alexandria, Benachi Coll. (local find). D. (max.) *c.* 25·8. Shape as **3**, with rouletting on wall; floor plain.

6 Silet edh-Dhahr; Sellers and Baramki, *BASOR* Suppl. Studies 15–16 (1953), fig. 30.8. D. *c.* 24. Probably this ware. *Ibid.* p. 12, fig. 17, no. 310, with stamped decoration, is perhaps a second piece of the same form.

7 Jerusalem, Palestine Museum (Iliffe, *Handlist,* no. 1805).

8 Abu Mena 66.1282. D. (max.) 22·8. Shape as **3**, with rouletting on wall; two grooves and a short incised wavy line (as on **9**) on rim. No stamps.

*9 Xanthos, Letoon, uncatalogued sherd. Est. D. 22. Similar; part of an incised wavy line preserved on rim.

Small version

*10 Abu Mena 65.513. Est. D. (max.) 18·0. Fragmentary. Shape similar to **3**, with rouletting on wall.

11 Antioch excavations; Waagé, *Antioch* iv.i pl. X, shape 930k. D. (max.) *c.* 17·2. Decoration not indicated.

Debased versions (in poorer fabric)

12 Khirbat al-Karak; Delougaz (1960) pl. 54·8. D. (max.) *c.* 25·0. Steep wall with thickened rim, bearing two grooves on top.

*13 Xanthos, Letoon 24. Est. D. (max.) 28. Fragmentary. Form transitional to Form 9, with open flaring walls. Faint rouletting on outside; rim plain.

Large variant (Form 1/2)

*14 Hierapetra, Crete (in Knossos study coll.). Est. D. (max.) *c.* 38·5. Shallow 'rouletting' (perhaps turning-marks) on outside of foot.

This common form is clearly a copy of African Red Slip Ware Form 84 with its rouletting and stamped decoration. The low hollowed-out foot is of the normal Cypriot type. No. **1** should be early in the series, as is indicated by its rim-form, the grooves on the wall and the stamped decoration, which is related to African R.S. Styles A–C. It may date from around 450. **2**, with its unusually high foot, is another early version. The normal type, here represented by **3–9**, is of simpler shape, rather shallow, with a cruder knobbed rim. A number of examples of this shape, probably mostly early, bear stamped decoration with motifs related to Style D in the African ware (see below). A few (e.g. **8–9**) have a short wavy line incised on the rim, a curious feature which reoccurs with greater frequency on the later Cypriot forms. These pieces are presumably late in the series. The small version of the Form (as **10–11**) is relatively uncommon; it merely copies the standard type.

The main period of production may be placed within the late fifth and early sixth centuries. No. **2** comes from the Agora deposits of *c.* 460–75, together with one or two frs. of more normal type. The normal version preponderates in the Cistern deposit at Abu Mena, which also produced **1** and **10**. The type is particularly common in the Kom deposit at Abu Mena, in association with African pieces of early sixth-century types: **8** comes from this group, together with some hundreds of identical pieces, almost all lacking any stamped decoration. At Antioch the shape occurs both in the earthquake deposit of 526 and in earlier (fifth-century) contexts

(*Antioch* iv.i 56–57). Evidence for later production is lacking, but it would appear that the late sixth-century Form 9 is a direct derivative. The changeover may have taken place close to the middle of the sixth century.

More or less related to the above are a number of more coarsely made pieces, mostly rather poorly fired. These vary considerably in shape; **12–13** give two varieties, while others exhibit a bifid rim and a more or less articulated foot. The external rouletting of these vessels is generally crude in the extreme. They are probably to be placed in the early–mid sixth century. Another variant, probably of similar date, is unusually large and thick-walled, and mostly plain. It could equally well be a derivative of Form 1. This type (here represented by **14**) is rare.

A selection of the stamped motifs found on vessels of this form or related to it appears on FIG. 84 a–j; for further examples see **1**, **3**, **4** and **6** (second piece) above, and *Antioch* iv.i fig. 35 (excluding two frs. at bottom left). The following pieces may also belong to this series: Delougaz (1960), pl. 31.3; *Hermopolis 1929–1939*, pl. 82 h; *Tarsus* i fig. 165 A.

FORM 3

Antioch 932f–k.

Small bowl corresponding to Form 2. Curved wall, foot of varying height, thickened or knobbed rim, with or without grooves. One or two lines of rouletting on outside. Size-range: D. *c.* 14·5–19. Fairly uncommon.

Examples:

1 Tell Qasile (Palestine); *Eretz-Israel* i (1951) 69, fig. 27. D. *c.* 19. Fairly deep form, with thickened rim, bevelled and grooved on outside, and low foot (cf. Antioch shape 932f). Presumably this ware.

*2 Athens Agora P 13085. D. *c.* 16·6. Fragmentary. Shallow, with low chamfered foot and knobbed rim without grooves.

A contemporary of Form 2. Examples occur at Antioch in association with late fifth–early sixth-century material (*Antioch* iv.i 56); **2** comes from a group of the second quarter of the sixth century. The development appears to be from a deep form with grooved rim (Antioch 932f) to a shallower one with plain knobbed rim (as **2**). A fragment of the former type is present in the Abu Mena Cistern group; pieces as **2** occur in some quantity in the Kom group (mainly early sixth century). Rouletted decoration is present on almost all examples; a few of the pieces from the Kom at Abu Mena also have the wavy groove on the rim (cf. Form 2 above). None are stamped.

Suggested dates: third quarter fifth century to second quarter sixth century.

FORM 4

Antioch 916.

Dish/bowl? with sloping wall and flat rim bearing row of punched knobs. Rouletting on exterior below rim. Groove on rim at lip. Rare; no complete examples.

The Antioch fr. (*Antioch* iv.i 53, fig. 35, bottom left, pl. X shape 916) is the only published example; whether this comes from a dish or a bowl is uncertain. A fr. from Salamis (Cyprus)[1] comes from a dish of the same general shape as Form 2;

[1] Recent excavations, unpublished.

it is of larger dimensions than the published sherd (D. *c.* 32). Rouletting on the outside seems to be a regular feature. The knobs on the rim are formed by punching up from below, like those on the North African bowls of Form 72, from which they may be copied. No good dating-evidence; possibly fifth century.

FORM 5

Antioch 930u (possibly also 932u).

Small bowl with shallow curved wall, flat base and triangular thickened rim. Undecorated.
Size-range: D. *c.* 14–19. Fairly common.

Examples:

1 Antioch excavations: Waagé, *Antioch* iv.i 53, pl. X, shape 930 u. D. *c.* 16·0. Rim rolled.
*2 Xanthos, Letoon 21. D. 19·2. Rim almost flat.

Perhaps the successor of Form 3; Antioch shape 932u appears to be an intermediate form. Generally roughly made, with wheel-ridging on the exterior and wire-drawn bases, but well fired. A few pieces have the wavy line ornament on the outside of the rim.

This form does not occur in the same groups as Form 3; it should be later. The intermediate shape Antioch 932u makes its appearance before *c.* 526 (see *Antioch* iv.i 57), but the form proper probably belongs to the second half of the century. The Xanthos bowl **2** was found together with early examples of Form 9.
Suggested dates: mid–late sixth century.

FORM 6

Antioch 960.

Dish/bowl with curving floor and upcurved rim, slightly hooked on inside, bearing two grooves on outside. Rouletting on underside. Rare; fragments only.

Example:

1 London, Inst. of Archaeology, from Auja Hafir. Est. D. *c.* 30.
Date uncertain; perhaps sixth century.

FORM 7

Basin with heavy rectangular rim, grooved on top and marked off from wall on outside by an angular offset. Rouletting on outside. Thick-walled. Fairly common. No complete examples.
Size-range: D. *c.* 30–40.

Examples:

*1 Apollonia (Cyrenaica), Byzantine Palace. Fr.; est. D. 36·5.
Cf. Delougaz (1960) pl. 32.1 = pl. 52.39; *Nessana* i pl. LVIII, Misc. 12, and perhaps pl. LI, shape 62.2.

A fragmentary example from Salamis, Cyprus (recent excavations), has part of the base preserved; it is of the flat grooved variety found on Forms 9–10. This piece

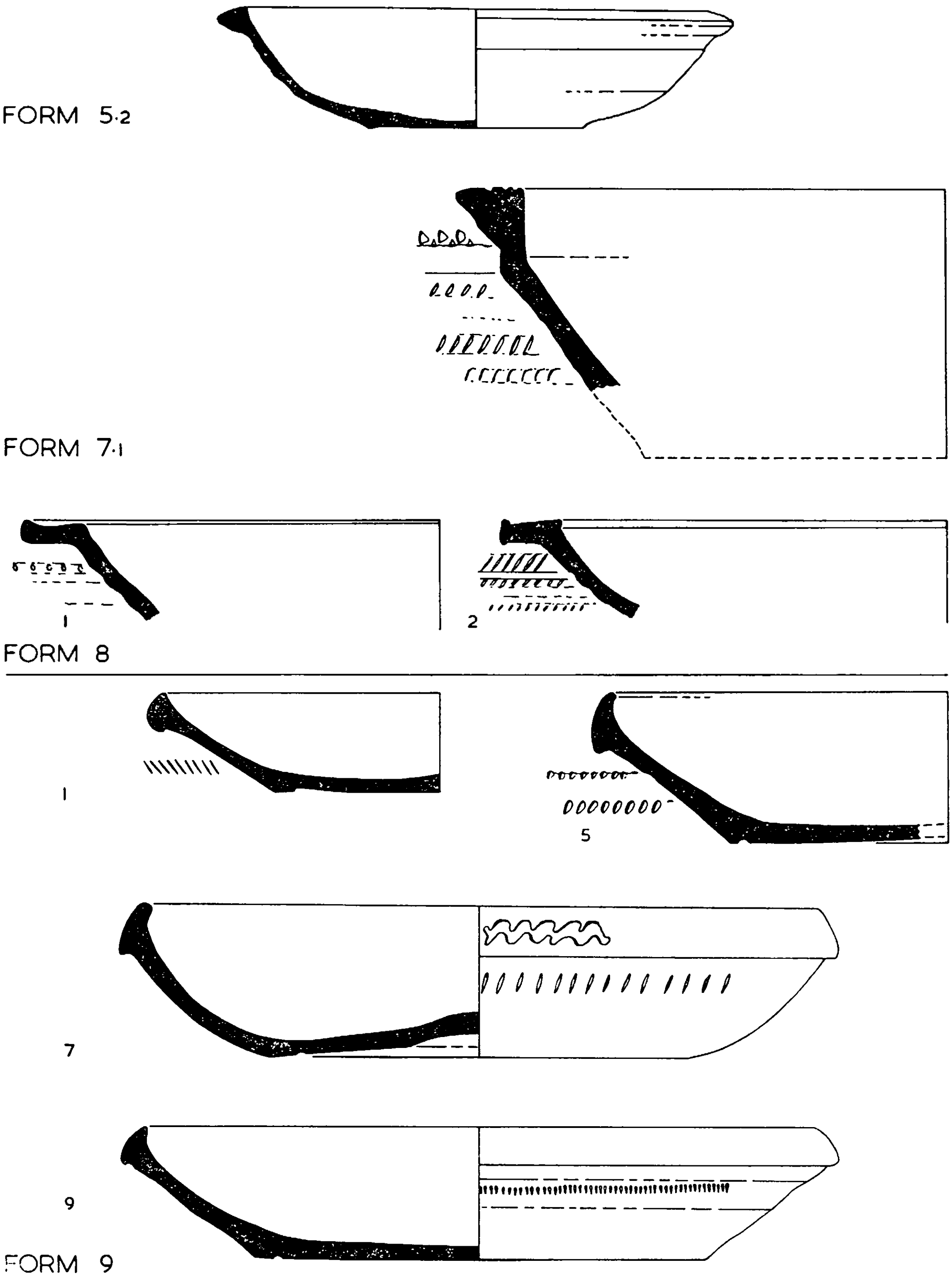


FIG. 81 Scale 2 : 5

should be a forerunner of Form 10. One fr. from Paphos (Cyprus) has a flat handle attached to the rim; this appears to be exceptional.

The development of the form is not clear. A base fr. incorporating a low foot, found at Khirbat al-Karak in a context of 528/9 or earlier,[1] may belong to an early version. Some rim frs. with the external offset scarcely marked or absent, from Salamis and elsewhere, may also be early, and suggest that the form may have developed from Form 2. Its main development must, however, have come rather later, since the shape does not occur in the two main deposits at Abu Mena.

Suggested dates: mainly second half sixth to early seventh century.

FORM 8

Dish/bowl with straight flaring sides and flat rim, terminating in a slight upward hook. Rouletting on outside. Uncommon; fragments only.

Examples:

*1 Xanthos, Letoon (uncat.). Fr.; est. D. 31. Fairly deep form; exterior irregular, with faint rouletting. Poorly fired.

*2 Newcastle upon Tyne (Mus. of Antiquities), from Bomba, Cyrenaica. Fr.; est. D. 33. Shallower; better fabric.

A fragmentary example from Tocra, Cyrenaica (recent excavations), of shallow form, has a low foot in the manner of Form 3.2.

Perhaps sixth century. No direct dating-evidence.

FORM 9

Antioch 931, 970.

Dish with broad flat base, flaring wall and thickened vertical or incurved rim, convex on outer face and projecting from wall at bottom. Low ledge-foot or groove round edge of base. One or two lines of rouletting, mostly short and lightly applied, on wall. Sometimes a stamped motif at centre of floor. A single short wavy line, incised with a blunt instrument, appears on the exterior of the rim of many examples; it would seem to be a regular feature.

Three varieties:

A with ungrooved rim and low ledge-foot. Early.

B with ungrooved rim and flat base, bearing a shallow groove close to edge. Antioch shape 931.

C with two grooves on exterior of rim; base as on B. Antioch shape 970.

Size-range: D. (rim) *c.* 20–30+. Common.

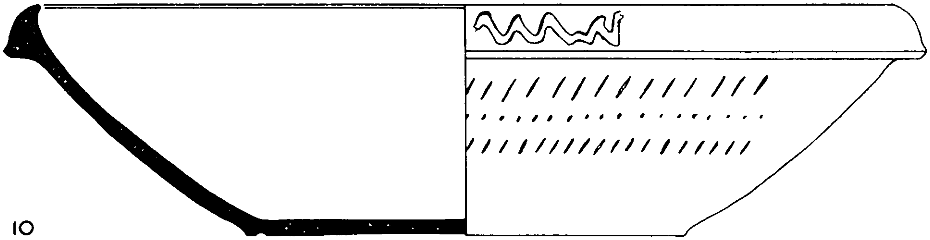
Examples:

Type A

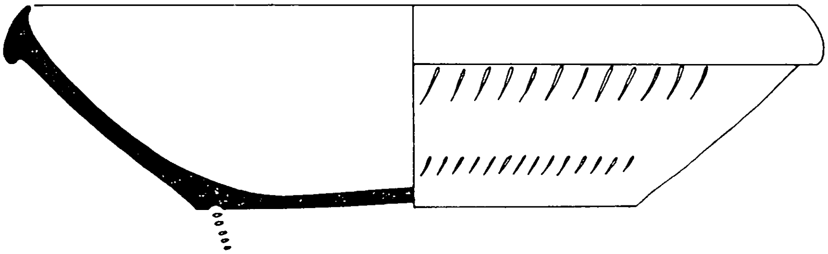
*1 Xanthos, Letoon 23. D. (max.) *c.* 21·6. Fragmentary. Rim fired white.

2 Auja Hafir; *Nessana* i pl. XLVIII, shape 12, A 7. D. (max.) *c.* 25·7. Wavy line on rim, which is incurved (cf. Type B).

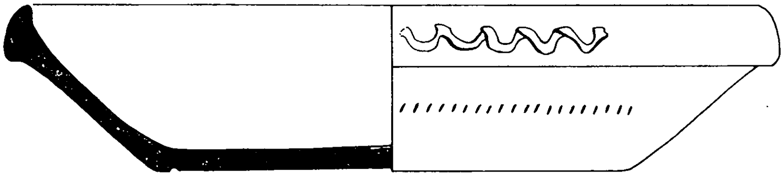
[1] Delougaz (1960) pl. 53.43. Cf. also the rim, *ibid.* pl. 52.25, from a similar context.



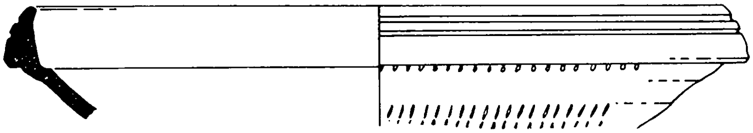
10



11

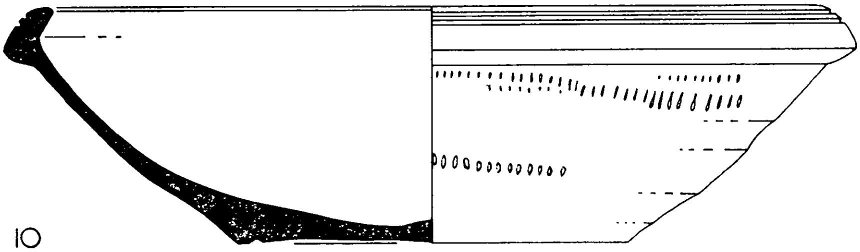


12



13

FORM 9



1

FORM 10

FIG. 82 Scale 2 : 5

3 Auja Hafir; *ibid.* pl. XLVIII, shape 12, A 8. D. (max.) *c.* 25·7. Irregular exterior; undecorated. A poor version (possibly an imitation); said to be same ware as **2** above (Nessana 'ware III').

(4 Beit Shean (Palestine); Fitzgerald, *Beth-Shan* III pl. XXXIV, 46. D. (max.) *c.* 24. Perhaps this ware; plain flat base, no decoration.)

Type B

*5 Apollonia (Cyrenaica), Byzantine Palace. D. *c.* 26·4. Fragmentary.

6 Xanthos. Letoon 28. Est. D. (max.) 24·0. Fragmentary. Similar, with angle on inside between wall and rim. Line of fine rouletting round base of wall; also traces below rim.

*7 Cyprus Museum, Nicosia, 1955.XI-16.1, from Kornos Cave; *Levant* ii (1970) 46, no. 2, fig. 3, pl. XXX. D. rim 24·7, max. 26·6. Rim discoloured, bearing wavy incised line. Stamped cross at centre of floor (FIG. 84k).

8 Cyprus Museum, 1956.X-22.1–2, from Kornos Cave; *Levant, loc. cit.*, no. 3. D. rim *c.* 23·5. Similar, with more incurved rim, with traces of grooves (cf. Type C). Wavy line on rim; one line of irregular rouletting on wall. Stamped cross at centre of floor (FIG. 84l).

*9 Emporio, Chios, from Byzantine fort (Chios Museum). D. (max.) 26·6.

*10 Emporio, Chios (see **9**). D (max.) *c.* 31·2. Deep (close to Form 10). Wavy line on rim.

*11 Emporio, Chios (see **9**). D. (max.) *c.* 28·0. Rouletting in groove under base.

*12 Salamis, Cyprus, from Gymnasium (Cyprus Museum stores, S.2.56+69); *Levant* ii (1970) 56, no. 1, fig. 7.2. D. (max.) *c.* 26·1. Wavy line on rim; stamped cross at centre of floor (FIG. 84n).

Type C

*13 Xanthos, Letoon 27. D. (max.) 25·1. Fragmentary. Most of rim preserved. Rim fired white.

14 Ramat Raḥel; Aharoni (1962) fig. 17·5. D. *c.* 30. Fragmentary, giving base profile. No rouletting indicated.

See also: Delougaz (1960) pls. 52.32–38 (with pl. 32.3), 53.2, 54.4.

This is the standard dish-form in the later stages of the ware, supplanting Form 2. Type A would appear to be the direct successor of pieces such as Form 2.12–13; the fabric, however, is better, reverting to the fine quality characteristic of the earlier examples of Form 2. Early pieces (Type A) tend to have a short thick rim lacking any pronounced incurve; their rouletted decoration is mostly neat. Their successors (Types B and C) have higher and more incurved rims, which sometimes make a sharp angle with the wall on the inside. For large versions of Type C, see Form 10. The fabric is good in almost all cases, though the finish, as on most pieces of this ware, is mediocre, with rough tooling-marks and erratic (frequently discontinuous) rouletting.

Stamped decoration reappears on some of the later pieces of this form, after an absence—as far as can be judged—of about a century. The earliest dated examples are **7–8**; the stamped series as a whole seems to fall within the second half of the seventh century. The standard scheme consists of a single cross impressed at the

centre, the floor being otherwise plain. The crosses (FIG. 84k–o) are of Greek type, mostly with fish-tailed arms; a few (as k) are thin and spiky, like those on coins of the period. This decoration seems unrelated to that on the other Late Roman wares, which are in any case considerably earlier; it could have been influenced by silverware.[1]

Evidence for the date of this form is good, except for the initial phases. Type A appears in association with late sixth-century material in certain deposits at Abu Mena;[2] it is generally absent, or at least rare, in known seventh-century groups. It may, then, be a fairly short-lived transitional shape. The standard types are B and C, which are regularly found together in seventh-century groups, and are probably more or less contemporaneous. Surprisingly, the form does not seem to occur in the early–mid seventh-century groups at Antioch published by Waagé, but it is common in the destruction levels of churches in Palestine, dating roughly from this period (e.g. Khirbat al-Karak). The Ramat Raḥel example (**14**) appears to have come from the same fill as a group of coins, the latest of which dates from 586/7; it serves to date the beginning of the series. A number of pieces from Cyrenaican sites, including **5**, come from contexts of about the period of the Arab invasion of 642/3. Slightly later are the two dishes **7–8**, from an excellent closed group of the 640s.[3] The Emporio pieces **9–11** come from destruction levels which may be dated on coin-evidence to *c.* 660; similar fragments are recorded from the slightly earlier habitation-levels on the site. At the end of the series stands the Salamis dish **12**, from a context which, on historical grounds, has been assigned to the very last years of the seventh century.[4]

Suggested dates: Type A—*c.* 550–600.
Types B and C—*c.* 580/600 to end of seventh century.

FORM 10

Basin. Large deep version of Form 9C; similar grooved rim, sharply inturned, flat grooved base and irregular rouletting. Not common.

Examples:

*1 Peyia, Cyprus (Ay. Georgios site, 1955; in Cyprus Museum stores). D. (max.) 28·7, H. 8·0. No wavy line preserved (but much of rim missing); no stamp.

2 Peyia, Cyprus (as **1**). D. to inner edge of rim *c.* 32, H. 9·8. Most of rim missing, including whole of outer part; no grooves visible, but probably existed. Wavy line on rim; flat ungrooved base; rest as on **1**.

Variant

3 Ayios Philon, Cyprus, no. 339[5] (in Cyprus Mus.). D. *c.* 25·0–25·2, H. *c.* 10·2. Basin with steep straight sides, high triangular rim and slight foot (cf. Forms 2, 9A). No rim grooves, but traces of a wavy line. Several lines of rouletting covering exterior.

[1] The series of silver dishes with central cross-motifs continues into the reign of Constans II (641–668); see Dodds, *Byzantine Silver Stamps* for examples.

[2] To judge by the advanced versions of Form 2 already present in early sixth-century contexts (see discussion above), it may have made its début around the middle of the century.

[3] The group contains several coins of Constans II, the latest of which appears to be of 643/4 (information from Dr. A. I. Dikigoropoulos).

[4] See *Levant* ii (1970) 54–56, with figs. 7–8.

[5] From excavations by Miss J. du Plat Taylor (to be published shortly).

A number of frs. with grooved rims and a diameter of 30–40 cm. probably belong to this form rather than Form 9C. The Emporio piece Form 9.10 might also be classed here.

Nos. **1–2** come from a destruction deposit of about the middle of the seventh century,[1] together with Form 11.1 and Form 12.1 below. For the probable predecessors of this form see under Form 7. The variant **3** suggests also a possible connection with Form 2.

FORM 11

Two-handled basin with steep flaring walls, flat base and slightly thickened rim, rounded on the inside and often bearing a flat moulding on the outside; two horizontal handles attached to wall just below rim. The exterior of the wall in many cases bears close-set irregular ridging, often with a 'stepped' appearance. The handles are short and heavy, round-sectioned, and pressed in slightly at the centres to ensure a firm grip. The slip-coating on this form is regularly partial only, covering the inside and the area round the rim, and sometimes the wall also. Size-range: D. *c.* 29–42. Fairly common.

Examples:

*1 Peyia, Cyprus (from same group as Form 10.1). Est. D. *c.* 35 (slightly irregular). Fragmentary. Thin slip over inside and most of outside.

*2 Cyprus Survey, ref. 1480 (in Nicosia), from Mylopetres, Kyrenia. Est. D. *c.* 30·2. Fragmentary. No handles preserved, but probably existed. Thin wash on wall, inside and outside, brushed roughly over floor.

For further (fragmentary) examples, see *DOP* xxii (1968) 211, fig. F, nos. 67–70.

No. **1** comes from a mid seventh-century context (see above); **2** could be rather earlier, since pieces with a similar rim-form are present in a late sixth-century group in Istanbul.[2] The form occurs elsewhere in association with Form 9, and seems to be purely late. It seems probable that pieces with a flat moulding on the exterior of the rim are early in the series, and those with slightly knobbed or hooked rims later.

Suggested dates: c. 550–650+.

FORM 12

Broad-bellied jar with two handles. One example only; about mid seventh century.

*1 Peyia, Cyprus (from same group as Form 10.1). D. rim 19·0, H. 18·2. Note the low hollowed-out foot, rouletting on lower part of body, and handles with broad central groove. Slip covers most of exterior and inside of neck.

In addition to the above, there are a few examples of closed shapes from sites in Cyprus. A one-handled jug, treated in a manner similar to Form 12.1 (but flat-based), was found in the mid seventh-century Kornos Cave group,[3] together with Form 9.7–8 (*q.v.*). From a well-group in Nicosia,[4] of similar or rather later date,

[1] Information from A. H. S. Megaw.
[2] Saraçhane excavations (unpublished).
[3] *Levant* ii (1970) 46, no. 1, fig. 3, pl. XXX.
[4] Ypsilantis site (1950). For other pieces from this group, see FIG. 84 m, and p. 400 below.

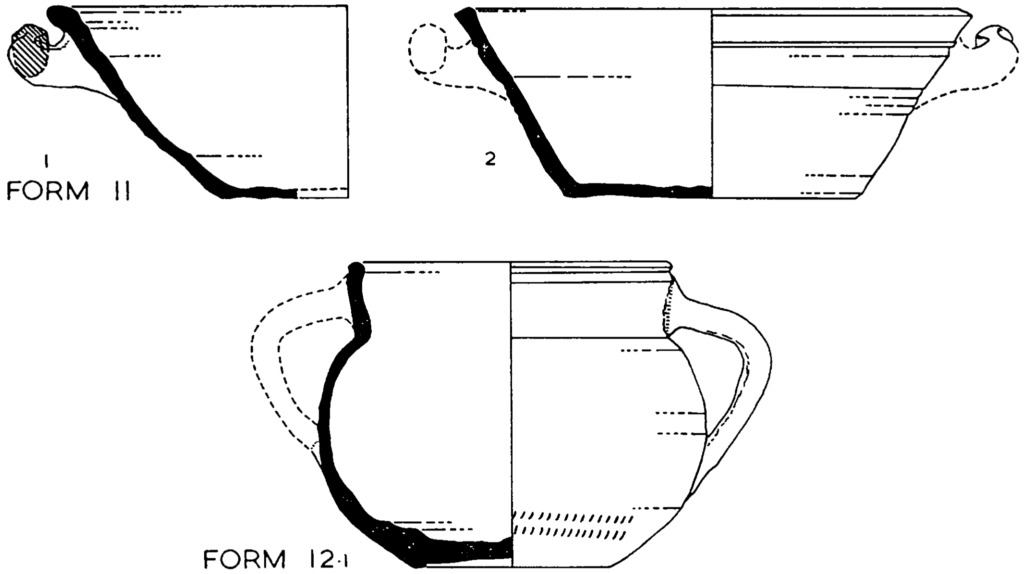


FIG. 83 Scale 2 : 9

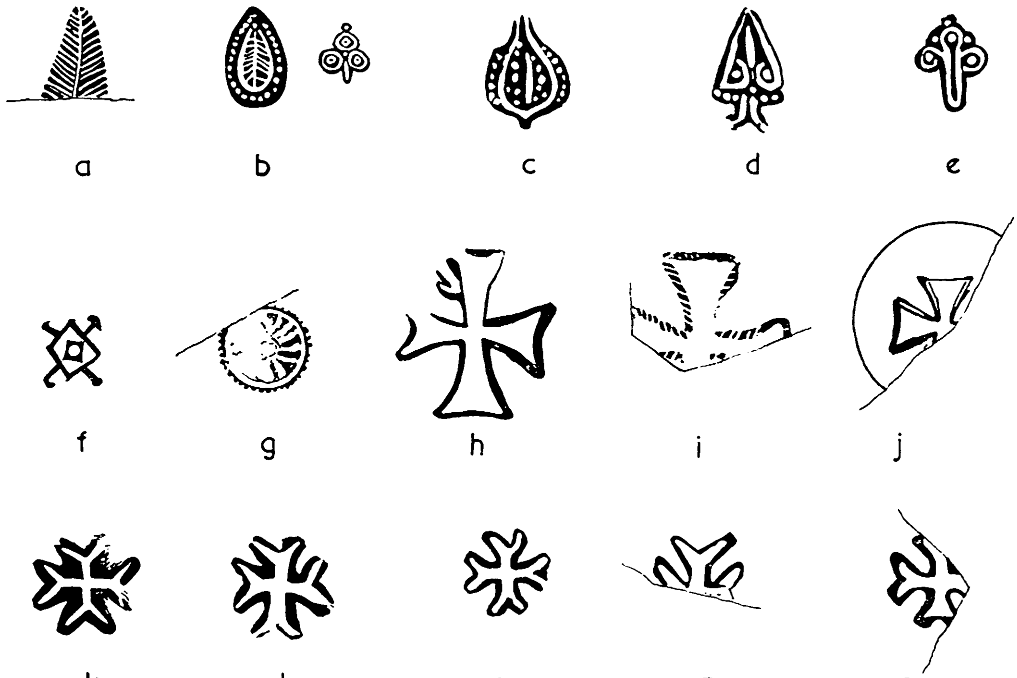


FIG. 84 Scale 2 : 3 a, b, d–f, h–j: Abu Mena c, o: Cypruss Survey, Nicosia. g: Paphos (Sarandakolonnes). m: Nicosia. k, l, n: see Catalogue.

come examples of slender elegant jugs in an unslipped version of the ware. Pieces such as these seem to be uncommon, and all late in the series.

DISTRIBUTION AND SOURCE

The ware is amply represented in all its phases on sites in Cyprus, where it is consistently the commonest fine ware in all Late Roman levels.[1] In Syria and Palestine it is also common, though here it shares the market with the other Late Roman wares, and the earliest and latest phases of production seem rather poorly represented. At Antioch it is stated to be common, though less so than *Late Roman C*,[2] appearing in considerable quantities in various deposits of the mid fifth to early sixth century;[3] on the other hand, it is absent in the major seventh-century groups, though occasional late pieces were found elsewhere in the excavations.[4] At Tarsus, to judge by the rather scanty published material, a similar situation prevailed.[5] A fair number of the published Late Roman pieces from Khirbat al-Karak should be of this ware; most seem fairly late.[6] The fabric is also fairly common at Auja Hafir.[7] In Egypt the situation is somewhat curious: numerous examples occur on sites in the Delta region, while further south hardly any are to be found. At Abu Mena the ware appears in overwhelming quantities in groups of the late fifth and early sixth century, and remains common until the seventh century, when it seems to have been largely supplanted by more local products; the African wares and *Late Roman C* are in contrast rather poorly represented. This is also so far the only site outside Cyprus to have produced examples of the early Form 1 in quantity. There is some evidence that the situation was the same in Alexandria.[8] In contrast, the ware is singularly lacking in contemporary groups at Karanis, where African R.S. Ware takes its place.[9]

The ware seems to have been regularly exported in the sixth–seventh centuries as far west as Cyrenaica and the eastern Aegean, where it figures prominently among the finds from Xanthos, rather less so in eastern Crete and at Emporio in Chios. A few pieces travelled as far as Athens and Saloniki. Some also reached Constantinople, where the basins of Form 11 seem to have been in some demand in the late sixth and seventh centuries, to judge by finds from the Saraçhane excavations.[10]

A pattern therefore emerges of a ware common in Cyprus which enjoyed considerable popularity elsewhere in the East between the middle of the fifth century and the beginning of the seventh. Its distribution was almost entirely

[1] E.g. at Salamis, Nicosia, Ayios Philon, Paphos and elsewhere (based on personal observation).

[2] *Antioch* iv.i 52.

[3] See *ibid.* 56–57.

[4] E.g. *ibid.* 53, shape 970 ('not very common'); see Form 9C above.

[5] *Tarsus* i 206, 277, no. 822, figs. 165 J–K, 166, 208 and fig. 208U are of this ware.

[6] Delougaz (1960) pls. XXXI.3, XXXII.1–5,7,9, LII.23, 27, 29–30, 32–39, LIV.4, 8, and possibly others may be classed as this ware, though not distinguished as such by the author. 'Imitation Late B ware' may have superseded it here during the seventh century.

[7] Baly's Ware III (*Nessana* i 277); most of the examples are of my Form 9 (*ibid.* pl. XLVIII, shape 12, A3, A7, A8, A10, A11).

[8] Finds from the recent Polish excavations, mostly late, seem to show the same pattern.

[9] Not a single example is present in the University of Michigan material. The only pieces known to me from Upper Egypt (none entirely certain) are *Hermopolis 1929–1939* pl. LXXXII h, Mond and Myers, *Temples of Armant* pl. LVI, type 139M 14=pl. LXXXI, SI Ab F2, and a fr. observed on the site at Aswan (Form 2?).

[10] *DOP* xxii (1968) 211, fig. F, nos. 67–72.

seaborne. The finds from Egypt suggest that it did not have the same prestige value as African R.S. Ware, but that—in the Delta region at least—it was sufficiently cheap to capture the mass market. As Waagé has noted,[1] the period of its maximum popularity coincides with the period of Vandal rule in Africa, and it may be seen as a cheap alternative to a fine ware that had become difficult to obtain. The forms current in this period (especially Form 2) are clearly modelled on the African products.

[1] *Antioch* iv.i 56.

VIII

EGYPTIAN RED SLIP WARES

THREE common classes of imitations of African Red Slip Ware may be distinguished in Egypt and the neighbouring regions. Two at least have a more than local distribution. All are late, not earlier than late fourth century, reflecting the fact that the African ware did not become common in the region until that period (see p. 421). I propose to call them *Egyptian Red Slip A, B* and *C* respectively. The third of these, which may not strictly speaking have been made in Egypt, but is common there, corresponds to Waagé's 'Imitation Late B' ware (*Antioch* iv.i 45, 58); it appears later than the other two.

EGYPTIAN 'A'

('Coptic Red Slip Ware')

This is the finest of the Egyptian wares, occurring regularly on sites throughout Egypt and Nubia, where it has generally been referred to in publications as 'imitation Samian ware'. In the latest classification of wares from the region, that of Adams, it is called *'Samian' Red Ware.*[1] The classic publication for the ware is Winlock and Crum's description of the pieces from the Monastery of Epiphanius near Luxor.[2] It appears to have been made in the Thebes (Luxor) region, where it is particularly common,[3] between about the end of the fourth century and the end of the seventh century.[4] An up-to-date bibliography of Nubian and Upper Egyptian finds is given by Adams (*loc. cit.*). [Note: Adams now (1970) suggests a production centre in the Aswan region, where closed forms also occur; see forthcoming articles in *Kush.*]

The ware represents as close an imitation of the African Red Slip Ware fabric as could be achieved using the local Nile valley clay. It is generally pinkish in colour, sometimes orange-red, with a thin rather matt slip of a slightly deeper shade applied over the whole of the surface. The exteriors of rims are often discoloured (as on *Late Roman C*), turning either purplish or creamy white. The clay is basically of rather poor quality, containing fine black and quartz particles, gold mica flakes and some larger red particles; it is of loose texture, unusually light-weight, and often very

[1] Adams (1962) 272, ware 4.

[2] H. E. Winlock and W. E. Crum, *The Monastery of Epiphanius at Thebes* i (New York, 1926) 85–87, pls. XXXI–XXXII.

[3] On the rubbish dumps of the Coptic site of Medinet Habu near Thebes, which I have personally inspected, the ware appears to the virtual exclusion of all other fine wares, as seems also to have been the case at the Mon. of Epiphanius nearby. A large proportion of the pieces published from Armant, some 30 km. away, share the same characteristics; they may be tentatively identified as belonging to this ware. Adams (*loc. cit.*) classes the ware as Egyptian, not Nubian.

[4] Adams' suggested dates for the ware (*c.* 600–750) are rather too late (see evidence cited below).

flaky. In some cases, however, careful levigation and a hard firing have produced an end-product comparable in quality to the African ware. The slip on the interior surface, where it is generally more thickly applied, often has a smooth soapy appearance, the result of burnishing. Where this has been carefully done, and the surface has not suffered from flaking, the result can be remarkably similar to the coarser versions of the African ware. Exterior surfaces are rather uneven, with rough spatula-marks or the like visible.

A wide range of fairly well-defined vessel-forms can be distinguished, though the place of many of these within the overall sequence remains uncertain. Some are obvious copies of African Red Slip Ware shapes of the fifth and sixth centuries. Rouletting of varying fineness often decorates the exteriors and stamped decoration is present on the floors of some of the dishes. The stamped motifs are largely copies of African Style D types, a little debased; they are almost invariably poorly impressed.

A typical range of vessel forms is published by Winlock and Crum, whose type series is here reproduced on FIG. 86.[1] In the comments which follow, I propose to retain their typology (Forms A–V), adding a number of new shapes (Forms AA *et seq.*) where this is necessary. Further specimens of the ware from various sites are shown on FIG. 85. The normal shapes are low- and high-footed dishes and plates (Forms F–M, etc.), deep vertical-sided bowls and beakers (Forms A–E) and small open bowls (Forms N–V, etc.); a number of closed shapes occur (see below), though these do not seem to be very common. Two types of foot are common: a low one of irregular shape produced by a rough tooling of the underside, and a high type, fairly thick and slightly knobbed at the bottom, presumably made separately and luted onto the body.

Among the earliest shapes are Forms AA and BB, close copies of the African Forms 61 and 67, which are among the first African wares to appear regularly on Upper Egyptian sites. This seems to indicate that the Egyptian ware arose as a cheap local substitute for the newly popular ware. Its beginnings should probably not be put before the late fourth century; prior to that painted wares in the local tradition appear to have dominated the market. The series of dishes Forms G–M all appear to be derived from the fine series of fifth-century African dishes (Forms 82–84); the stamped and rouletted decoration on some of them is an almost exact copy of that on the African pieces. The common Form J (normally unstamped) represents the latest version of this class. The high-footed dishes may owe something to the African Forms 104–106; Form II in particular seems to be directly modelled on African Form 105. The bowls Forms P–U copy the late fifth- to sixth-century African Forms 91, 93–95 and 99; a few bear single stamped motifs modelled on the African Style E (i). A late version of the flanged bowl series is represented by Form V. The series of deep bowls Forms A–E do not fit into the general pattern; these, and the rare closed forms, seem to owe more to the local pottery tradition. Further comments on individual forms appear in the type series below.

[1] Winlock and Crum (1926) fig. 37. Originally published at scale 1:4.

CATALOGUE OF VESSEL TYPES

A–B Deep vertical-sided bowls with wall-mouldings and low feet. Mon. of Epiphanius only; A is early in the sequence there (around 500?).[1]

C Bowl with wall curving to vertical rim; low foot. Rare; sixth century or later. Cf. Griffiths, *LAAA* xiv (1927) pl. LIX 15=LX 16, from Faras.

D Deep bowl with inward-sloping wall and low foot; rouletted. Mon. of Epiphanius, early (around 500?). Cf. Form CC.

E Deep bowl or beaker with near-vertical wall and high foot; rouletted. Rare; sixth century or later. Cf. Form DD.

F Dish with upcurved rim and high foot; undecorated. Uncommon; sixth–early seventh century? A rim fr. from Medinet Habu (Athens Agora study coll.) may belong to this type.

G Similar, with low foot; angle of rim varies. Small to medium size. An example in Mainz (O 17534) has traces of stamps; rouletting also found. Cf. also Presedo Velo (1964) 51, fig. 10.3, from Cheikh-Daud. Probably not late (end fifth–early sixth century?).

H–I Dishes or plates with shallow sloping floors and heavy upright overhanging rims; low feet; generally stamped decoration, etc. For general shape, cf. *Late Roman C* Form 3, though the model is probably African Red Slip Form 82. Some of the Mon. of Epiphanius pieces are in early contexts. Also: Presedo Velo (1964) 49, fig. 10.1. Probable date: second half of fifth century or slightly later. Fairly common. Cf. Form EE.

J Deep dish with carinated wall and heavy knobbed or tilted rim; low foot. Offset at edge of floor. Cf. African Red Slip Form 84. Three versions: (1) with stamped decoration enclosed by rouletting on floor; early. (2) undecorated; later.[2] (3) small bowl-like version of (2)=Adams (1962) 272, fig. 2, type E 6; late. Common, especially Type 2. Perhaps not the earliest version of the shape; see Form FF below. The standard scheme of decoration on Type 1 would seem to be a central stamp surrounded by subsidiary stamped motifs, with a band of rouletting around them (probably Group B below). Type 1 could therefore be early or mid sixth century. Example: FIG. 85c (British Museum, Egyptian Dept., 1929.10–16.132). Type 2 is the standard late dish-form in the ware, common in contexts of the late sixth–seventh centuries. At Abu Mena it occurs regularly in association with Cypriot Red Slip Ware Form 9; the example FIG. 85e (Cyprus Mus., 1933/II–12/16) was found together with a group of glassware of late sixth–seventh century date.[3] The presence of this type in some of the

[1] The dates of occupation of the Mon. of Epiphanius are not very clear. Winlock and Crum, *op. cit.* 98–103, seem to favour a late sixth–early seventh century date-range on the basis of papyri and ostraka; however, some of the pottery may go back to the end of the fifth century (see below). I suggest an overall date-range of *c.* 475/500–625.

[2] Cf. Presedo Velo (1964) fig. 11.14 (ware?); M. Pellicer and M. Llongueras (1965) 154, fig. 17.15 (see Appendix 1 for full title).

[3] Date according to D. Barag.

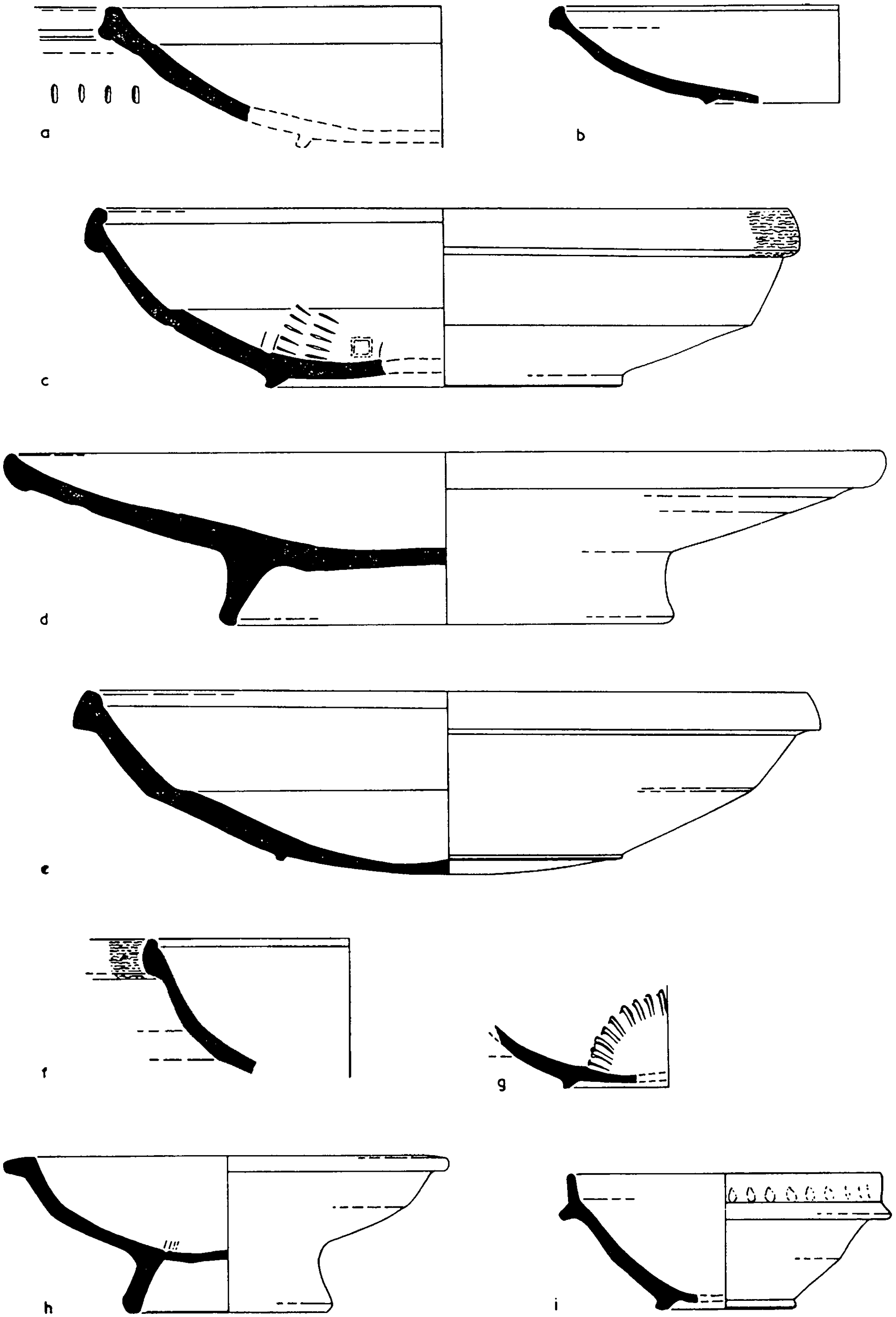


FIG. 85 Scale 2 : 5

latest groups at Abu Mena indicates that it continued to be made until late in the seventh century. A few of the later pieces have a pair of deep slashes across the rim. The small version Type 3 occurs in similar contexts. Examples: FIG. 85 f, g (from late levels at Tocra and Apollonia, Cyrenaica).

K Dish with shallow sloping floor and thickened rim, concave or slightly flanged on outside, separated from floor on inside by an offset or concave band; low foot. A line of coarse rouletting normal on outside, often with a slight carination; inside mostly undecorated. Armant types 138 C–D13 (138D appears to be a small version). FIG. 85 a–b (from Medinet

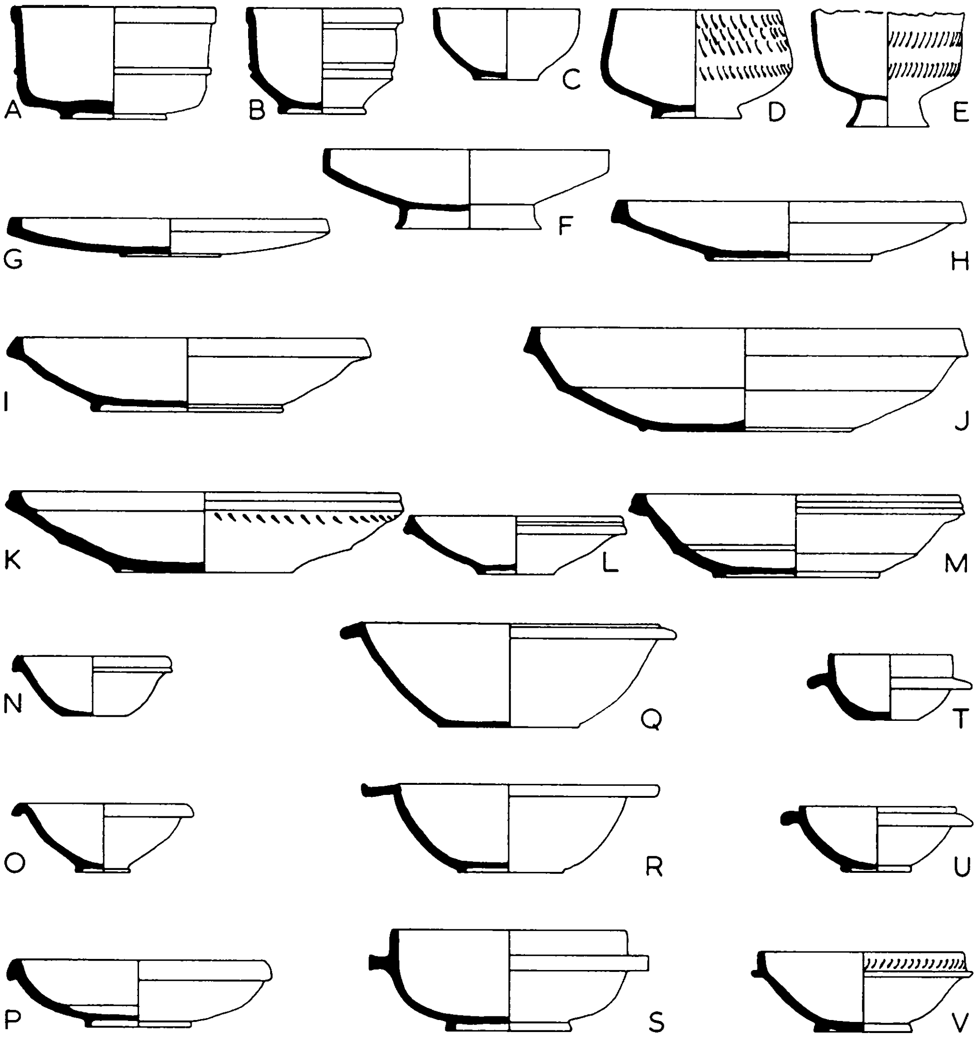


FIG. 86 Scale 1:5

Egyptian 'A' type series (after Winlock & Crum, *The Monastery of Epiphanius* i, fig. 37)

Habu); also Presedo Velo (1964) 49, fig. 10.2, from Cheikh-Daud. A later development of Forms H–I. The only example from Karanis (Univ. of Michigan 7173) has a cross-monogram stamp surrounded by four crude rosettes, placing it around the beginning of the sixth century (Armant type 138B is related). The undecorated pieces appear to be later (mid–late sixth century?). Fairly common.

L Small dish with sloping floor and thickened grooved rim. Small version of H–I; uncommon.

M Dish as Form J, but with grooved rim; undecorated. A few frs. at Abu Mena in seventh-century levels; apparently a variant of Form J2 (for the thick angular rim cf. FIG. 85e).

N–O Small bowls with short overhanging rims and low feet or flat bases; undecorated. Mon. of Epiphanius only; probably sixth century.

P Bowl copying African R.S. Ware Form 99; undecorated. Mon. of Epiphanius only; sixth century.

Q Flanged bowl, as African R.S. Form 91 (earlier versions); large and small versions. Flat-based; some examples said to be stamped (Mon. of Epiphanius). Armant type 14 (A–D). Predecessor of Form U?

R Bowl with flat rim, hooked upwards at lip; low foot. Cf. African R.S. Form 95. Mon. of Epiphanius only; early(?) sixth century.

S Open bowl with low foot and wide angular flange. Armant type 15P (=*The Bucheum* iii pl. CLIV, no. 2; *JEA* xvii (1931) pl. XLVII), found in association with an example of Form HH. Perhaps first half of sixth century. Uncommon.

T Small flat-based bowl with flange halfway up wall. Mon. of Epiphanius; sixth or early seventh century.

U Flanged bowl as African R.S. Ware Form 91; later version of Q. Low foot or the like; mostly small and undecorated. Some examples from Karanis. A larger version with rouletting also occurs: e.g. Mainz O 17540, with low foot, line of long rouletting round floor and square-cut, slightly hooked flange (cf. Form S). Another Karanis piece (Univ. of Michigan 20103), of the larger type, is a particularly close copy of Form 91C, with flat grooved base, drooping flange and one line of rouletting in a hollow round floor. This should date from the second half of the sixth century; the other examples may be rather earlier.

V Bowl with small flange and coarse rouletting on outside of rim; low foot. Small to medium-sized. The standard late version of the flanged bowl series; very common. Two types are common: (1) with low rim, bearing a single line of rouletting (as type-specimen): Armant type 15 O. (2) with high rim, bearing multiple rouletting and often a groove at lip: Armant type 15Q 10. Further examples of Type 1: Mainz O 7419, from Arsinoe; Mainz O 17530 (FIG. 85i), 17531; Toronto 910.175.327; Griffiths, *LAAA* xiv (1927) pl. LIX 17=LX 17, from Faras; *Tell Edfou*, 1937, pl. 38.7;

frs. from various other sites. This type is not present at Karanis or in the earlier contexts at Abu Mena; the Mon. of Epiphanius examples are presumably among the later pieces from the site. Probable date: second half sixth to first half seventh century. Type 2 appears to be exclusively late (seventh century+). A fr. occurs in one of the latest levels at Abu Mena (cat. 66.666) and coarser versions without rouletting persist on Nubian sites (e.g. Qasr Ibrim) until a very late date, along with poor versions of Form J. A very deep example with rouletting from Wadi el-Arab in Nubia may be a late version of Type 2 or a derivative.[1]

New forms

AA Flat-based dish copying African R.S. Form 61. Armant type 7M 2 would appear not to be African Red Slip Ware; the undecorated types 9C and 9F could go with it. The stamped frs. Armant SSFL 4–15, which copy African R.S. Style A, probably go with them (or with Form BB). In view of the existence of copies of the contemporary African Form 67 in Egyptian A ware (see BB below) it seems that these should also belong to the ware. I have seen a few frs. of Egyptian 'A' ware which may be of this shape.

BB Shallow bowl/dish copying African R.S. Form 67, with low foot and poorly modelled rim. Armant types 11C–D. The type-specimens were found together with coins of fourth- to fifth-century date. A similar piece in Egyptian 'A' fabric is present in the Cistern group at Abu Mena (65.524). The Armant type-specimens are undecorated, but it is likely that stamped decoration occurred on some examples (see AA above).

CC Deep bowl with curved wall, sloping inwards a little at rim; low foot; rouletted. Cf. Form D. Examples: Griffiths, *LAAA* xiv (1927) pl. LIX 16 = LX 15, from Faras; three specimens from Karanis (Univ. of Michigan 7111, 7115, 7123); Toronto 910.175.355. Sixth century or earlier.

DD Deep bowl with straight steep wall, low foot; rouletted. Cf. Form E. Two examples from Abu Mena in seventh-century contexts (66.215, 66.295).

EE Large shallow dish with heavy upright rim, flanged at bottom, and low foot; stamped decoration. Form very similar to *Late Roman C* Form 3B, though probably intended as a copy of African Red Slip Form 82. Diameter of foot small (some variation). Probably the predecessor of Forms H–I. Two examples: Armant Type 12B (*Bucheum* iii pl. CLIV, no. 7), with elaborate stamped decoration of uncertain type; Antinoopolis (unpublished; from recent Italian excavations), with poor stamped decoration in grooves.

FF Dish with low sloping wall and vertical rim, grooved or flanged; low foot; offset at edge of floor. A shallow version of Form J; cf. also K. Examples: Mainz O 17536; three from Karanis (University of Michigan 7128, 7133, 20112). The larger versions are stamped, the smaller ones plain. Probably early–mid sixth century.

[1] Emery and Kirwan (1935) 515–6, type XIV, fig. 90.13 (see Appendix 1). For further late(?) examples see Presedo Velo (1964) 49, fig. 9.2–3, from Cheikh-Daud.

GG Dish with shallow sloping floor, upright rim with slight inward hook, bearing grooves at top and bottom, and low foot. Undecorated. Variant of G or I? One example: British Museum, Egyptian Dept. 50634.

HH Large plate with rounded rim, slightly rolled on underside; high foot. Example: FIG. 85d. British Museum, 1928.4–13.11. Poorly impressed cross with pendants (Group B, elongated) at centre; no other decoration. Probably first half of sixth century (on basis of stamped decoration). Similar: Armant type 13B (=*JEA* xvii (1931), pl. XLVII, 1).

II Plate, similar, with heavy knobbed rim; undecorated. Cf. African R.S. Ware Form 105. A near-complete example from Qasr Ibrim (recent E.E.S. excavations); a fr. from Abu Mena (66.672) comes from an early–mid seventh-century group, together with Form V2.

JJ Plate, similar, with simple tapering rim; medium-sized or smaller. Two examples from Abu Mena (66.278 and 287) in a very late context (probably second half seventh century).

The high feet of these three forms may be derived from early versions of the African Form 104, or possibly from Form 89; both of these forms occur on Egyptian sites. The feet of the bowls which follow also have their models in African Red Slip Ware of the late fifth to early sixth century.

KK Bowl imitating African R.S. Ware Forms 93A, 94A; bowl rather shallow, short flat rim, high foot; normally a single stamp surrounded by groove at centre. Rather small size. Example: FIG. 85h. Victoria and Albert Museum 455–1891, from Karanis (with dotted cross-monogram stamp = Group A). Three other examples from the Karanis excavations (University of Michigan 7139, 20017, 20108). The latter were found together with examples of their African prototypes; date therefore around A.D. 500.

LL Similar, larger, with short rim; cf. African R.S. Form 93B. One example: Mainz, RGZM, O 17543 (groove round floor; centre missing). Probably later than KK, about early–mid sixth century.

MM Small bowl as KK, but with low upright wall, with rim marked off by groove. One example: University of Michigan 20787, from Karanis (stamped cross within groove at centre). Found with examples of KK; apparently too early to be a copy of African R.S. Form 101. About A.D. 500.

NN Small bowl with heavy drooping rim consisting of a small bead above and a thick overhanging roll below (almost a separate flange); low foot. Small counterpart of Form K, etc., related to Form N; perhaps the forerunner of Form V. Some pieces have rouletting on the wall. Armant type 12 M 10 (with vertical grooved rim bearing rouletting) may be an early version of the shape. Examples occur in the Kom group at Abu Mena; probably early sixth century.

Some other forms occurring at Armant may also belong to this ware; I have not seen the originals.

Closed forms

These are rather uncommon. A distinctive form is a small flagon bearing rough incised patterns on its flat shoulder; FIG. 87a shows one of a number of examples in Toronto (910.175.217, unprovenanced). Similar flagons have been found at Karanis,[1] Jerash[2] and Abu Mena (cat. 65.918). Some development in the type may be noted: the Karanis examples, which should be early (sixth century?), have a higher foot than the type specimen, and the handle is attached to the outside of the rim; the other pieces have a flat grooved base with external moulding and a small cordon at the base of the neck. The latter should be late; the context of the Abu Mena flagon indicates a mid(?) seventh-century date. The Toronto piece seems to represent an intermediate stage in the development of the type.

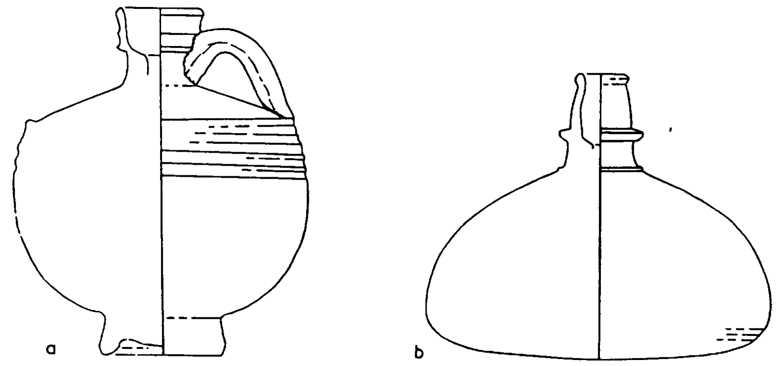


FIG. 87 Scale 2:5

A second distinctive form to be classed under this ware is a squat narrow-mouthed bottle with a round bottom. FIG. 87b shows one of several examples of the shape in Toronto (910x156.17); similar pieces are published from Ehnasya and Ballana.[3] The Ehnasya piece appears to be from an early seventh-century context; the Ballana one should be considerably earlier.

Some other shapes, not closely datable, occur among the Karanis finds and in the Toronto collections.[4]

STAMPED DECORATION

This shows marked similarities with African R.S. Ware Styles D and E. The standard scheme of decoration on the dishes consists of one or more cross-motifs at the centre surrounded by a row of small subsidiary stamps, generally combined with grooves, and a zone of rouletting enclosing the whole. The small bowls mostly have a single stamp at the centre, often surrounded by a groove in the manner of African Style E. The use of subsidiary motifs on the dishes is peculiar to this ware;

[1] University of Michigan 7266 and 20715.

[2] Yale 1929.690.

[3] Petrie, *Ehnasya*, pl. XXXIII, no. 114; Emery and Kirwan (1938) 394, pl. 114, type 58.

[4] For details of the latter, see my catalogue (forthcoming).

the stamps themselves sometimes copy the smaller motifs of African Style D (ivy-leaf as Type 110, triangles as Types 105–106, etc.), but they generally appear in the field round the main stamp or in the same zone as the surrounding rouletting, not in a well-defined band between grooves as on the African ware. They are mostly poorly impressed and indistinct. For a selection of stamped frs. of this ware see *Mon. of Epiphanius* i, pl. XXXII B. Two series of motifs appear to be popular on the dishes:

GROUP A: one or more linear or dotted cross-monograms at centre, surrounded by subsidiary stamps and a broad band of rouletting. *Mon. of Epiphanius* i, pl. XXXII B, bottom row centre and right. Early, probably third quarter fifth century into early years of sixth century. Cf. African Style D, stamp types 289, 294, 299, etc. A fr. with a cross-monogram of this type occurs in the Cistern group at Abu Mena, of *c.* 480 (cat. 65.574); a similar one also appears on Form KK.

GROUP B: a dotted cross bearing four lentoid 'pendants' between the arms; sometimes subsidiary stamps; band of rouletting narrower, or replaced by simple grooving. Examples: *ibid.* pl. XXXII B, top left, and top right of centre. The origin of the cross-motif is not clear; it has similarities with the *Late Roman C* Motif 79, but can hardly be copied from it. The development of the type appears to be from a more or less equal-armed version, found with subsidiary decoration as that of Group A (see pieces just cited), to an elongated type (used in isolation on Form HH). Date probably rather later than Group A, mainly first half of sixth century.

Other types of cross-motifs also occur, including a plain dotted cross similar to African R.S. Type 322. Simpler versions of the above schemes occur on some small dishes (e.g. Armant pl. LXXXII, scheme SSCH 11, on the small dish type 138 B; also Univ. Michigan 7173—see under Form K). A firm point at the end of the series is given by the unique piece B.M. 91.7–30.3 (Dalton (1901) no. 926) which bears an elaborate jewelled cross exactly copying African R.S. Type 330, flanked by two lambs. These stamps must surely date the piece to the second quarter of the sixth century or shortly after. The rest of the decorative scheme (not illustrated by Dalton) consists of two grooves, a single line of rouletting over the line of the foot, and a further groove (cf. scheme of Mainz O 17528); the shape of the vessel appears to be Form J1. This piece, which is one of the few copies in this ware of the developed African R.S. Style E, gives a fair indication of the date of the end of the stamped series. No stamps are recorded on the pieces from late sixth- and seventh-century contexts.

An earlier stamped series, corresponding to African R.S. Style A, may also be distinguished among the published pieces from Armant. In all probability these too should be classed as *Egyptian A* (cf. remarks on Form AA above). The motifs used are the familiar palm-branches, circles, grilles, etc. of the African series, distinguished only by their poorer rendering. The earliest examples would seem to date from the end of the fourth century, when the African wares were first making their appearance in Upper Egypt.

DISTRIBUTION

Egyptian A is the most widespread of the Egyptian red-slip wares; it occurs in varying quantities throughout Egypt and Nubia. It appears to be commonest in the Thebes (Luxor) region (see above); there can be no doubt that here it served as the standard tableware, and it seems possible that it was manufactured in this region. Further south it is also very common; frs. of the ware occur by the thousand at places such as Aswan.[1] On Nubian sites (e.g. Qasr Ibrim) the later phases of the ware are fairly well represented alongside the somewhat coarser local products, though it is virtually absent on the earlier X-Group sites (e.g. the Ballana and Qustul cemeteries). Importation here seems to be linked with the spread of Christianity in the sixth century. In Lower Egypt, the ware occurs in modest quantities only in the late fifth- to early sixth-century groups at Abu Mena and Karanis, being totally overshadowed by the mass of African and Cypriot imports. The later forms, however, especially J2–3, are very common at Abu Mena and Alexandria[2] along with the later Mediterranean imports, and at Abu Mena *Egyptian A* continued to be imported after the disappearance of these wares—examples occur in the latest groups from the site, which may date from around the year 700. The ware appears in small quantities on sites in Cyrenaica, in particular at Ras el-Hilal in the east;[3] Form J2–3 is the commonest type. A few examples have been found in Cyprus, notably FIG. 85e. A few frs. are also present at Auja Hafir in the Negev.[4] The pieces from these regions are predominantly late (mainly seventh century).

RELATED FABRICS

Quite a number of the pieces noted above show a tendency to be fired to a yellowish-cream colour. This clay colour also characterizes a small group of vessels of equally fine fabric bearing painted decoration in purple and orange-red; these constitute Adams' ware 13 ('Samian cream ware').[5] Specimens occur in Upper Egypt and Nubia, where they appear to have been the prototypes for the various later Nubian painted wares listed by Adams (*op. cit., passim*). A few examples have been found as far afield as Constantinople and perhaps Antioch.[6] The normal shapes seem to be bowls with decoration on the inside. Of particular interest is a large plate with circular compartments inset in the floor (one at centre and four on the outer part), from the Monastery of Epiphanius.[7] This seems related to the rare African R.S. Form 111, which I have tentatively restored on the basis of it. The ware as a whole, where datable, seems to belong to the late sixth or seventh century.

EGYPTIAN 'B'

Under this heading I group a rather diverse series of Lower Egyptian products, characterized by a thick coarse reddish fabric and a thick burnished red slip. These may have been made at more than one centre. A typical feature is a sandwich-like appearance at the breaks, due to irregular firing—a combination of a deep

[1] Personal observation on the site.

[2] Numerous examples from the recent Polish excavations.

[3] *PBSR* xxxii (1964), 11 (under Coptic R.S. Ware).

[4] Seen in London (Institute of Archaeology).

[5] Adams (1962) 273. The close connection with *Egyptian A* (his ware 6) is here noted.

[6] *DOP* xxii (1968) 211, no. 80, figs. F and 21; Waagé (1948) 59, C 4, etc.

[7] Winlock and Crum pl. XXXIII A.

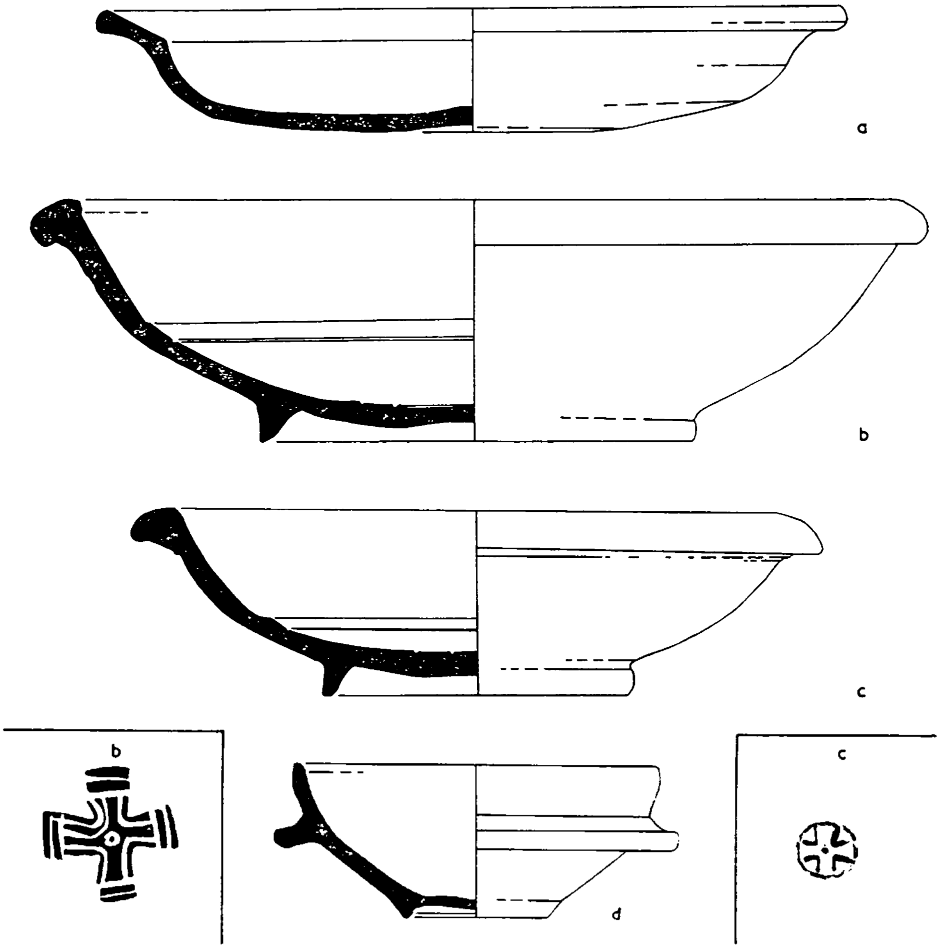


FIG. 88 Scale 2 : 5

purplish-red core and orange-red surfaces is very common, though more brownish shades are also found. Gold mica specks are normally present in the clay.

The vessel-forms present are fairly numerous; a good selection of these are represented in the Mainz collections.[1] Several clearly copy African R.S. Ware shapes; some of these also bear stamps of debased African type. Selected examples are drawn on FIG. 88. The earliest (e.g. FIG. 88a[2]) are, as in the case of *Egyptian A*, copies of African dishes of the late fourth and early fifth centuries, with stamped motifs derived from African R.S. Style A. Copies of the later fifth-century dish-types (Forms 82–84) are fairly common. FIG. 88b,c[3] shows two bowls which imitate the African Form 93; several similar examples are present in the late levels

[1] In series O 17528–17579 (ex Bersu coll.), mixed with examples of African R.S. and *Egyptian 'A'*.

[2] Mainz O 27668, from Hermopolis Magna. Seven poorly impressed 'fringed circle' stamps on floor surrounding a groove.

[3] British Museum 1911.10–18.3 and 4, from Memphis. Stamped cross at centre of each (see drawing).

at Karanis. Imitations of the flanged bowls Form 91 are also common, occurring both in the Cistern deposit at Abu Mena and at Karanis; for a crude version of the type see FIG. 88d.[1] Later types, common in the seventh century, show marked similarities with *Egyptian C* ware (*q.v.*); these are often decorated on the outside of the rim or the underside with lines of cord-impressions forming a kind of crude 'rouletting' (see below).

Examples of the ware have been found on a number of sites in the Delta and Fayoum regions of Egypt, and it would appear to be native to the area. At Abu Mena and at Karanis (in the late levels) it appears regularly, though in moderate quantities only. Exportation to other areas is minimal.

EGYPTIAN 'C'
('Imitation Late B')

A third fabric, which I class for convenience as Egyptian, though it may have been made elsewhere, is Waagé's *Imitation Late B* ware,[2] a red-slip ware common in Egypt and elsewhere in the East in the seventh century. Its main features are a gritty, rather loose-textured orange or brown clay and a thick deep red slip with a soapy appearance, apparently produced by burnishing. The clay contains lime, quartz and various dark grits, but very little mica; it sometimes exhibits a slightly grey core. Air-holes are common, and the breaks tend to have an abraded appearance. The slip, which is slightly micaceous, tends to be thick, smooth and lustrous on the inside and rim, thinner and duller on the outside, which is also less carefully smoothed. Examples from Abu Mena, where the ware is common, show basically the same features as Waagé's pieces from Antioch,[3] and the ware seems to be widespread throughout the East, occurring also in Palestine and occasionally in Cyprus. The 'soft tan ware' found in quantities at Khirbat al-Karak[4] would appear to be the same fabric, to judge by the published description.[5] The source of this ware is still not clear; it shares certain features with *Egyptian B,* but the fabric shows that it was not made in the Nile Valley. The clay bears some resemblance to that of the local wares of Abu Mena, suggesting that it may have been made in the desert fringes of Egypt (though not at Abu Mena itself). A source in the regions directly to the east of the Delta seems a possibility, though the ware might equally prove to be Palestinian. The occurrence of examples on Palestinian sites seems, however, rather spasmodic. At any rate, the production centre must have been close to the Mediterranean coast, on account of its wide circulation.

[1] London V & A Mus. 472–1891, from Gurob.

[2] Waagé (1948) 44–45.

[3] He describes the ware as follows (*op. cit.* 45): 'The body is dark brown in color, gritty and rather coarse; the exterior surface is not well-smoothed and often is rather unevenly finished. A thick, rather soft, dark red-brown slip covers most of the pot, but it is seldom polished except inside, where its softness and lack of thorough polishing prevent it from ever reaching the high, smooth surface of the real Late B, from which these "Imitation Late B" can be distinguished at a glance. Whether they represent a purely local attempt to copy Late B remains to be determined.'

[4] Delougaz (1960) 32, pls. 53 *passim,* 54.2 and perhaps also 33.1.

[5] Delougaz, *loc. cit.*: 'The second group, which at first glance does not appear to differ greatly from the first [i.e. the other Late Roman wares], consists of sherds of a fairly soft tan to light brown fabric, covered with a slightly thicker red slip, usually well smoothed and glossy on the inside with a polish extending over the rim for a short distance on the outside.' D. notes that some burnt examples have turned dark brown or dark grey.

Three examples from sites in Cyprus and Turkey are illustrated on FIG. 89. They show the chief forms: a dish or shallow bowl with sloping floor and a knobbed rim (FIG. 89b),[1] possibly a derivative of African Red Slip Form 104C, and a flat-based dish closely copying Cypriot Red Slip Form 9 (FIG. 89c).[2] FIG. 89a, from Alahan in Cilicia,[3] represents a rarer shape, a shallow dish perhaps modelled on African Red Slip Form 105.[4] A fourth form is a shallow carinated bowl with a thickened rim,[5] which occurs also in *Egyptian B* ware.

Knobbed rims and crudely shaped feet with a rounded profile are typical. The standard decoration on the dishes consists of two separate grooves or pairs of grooves

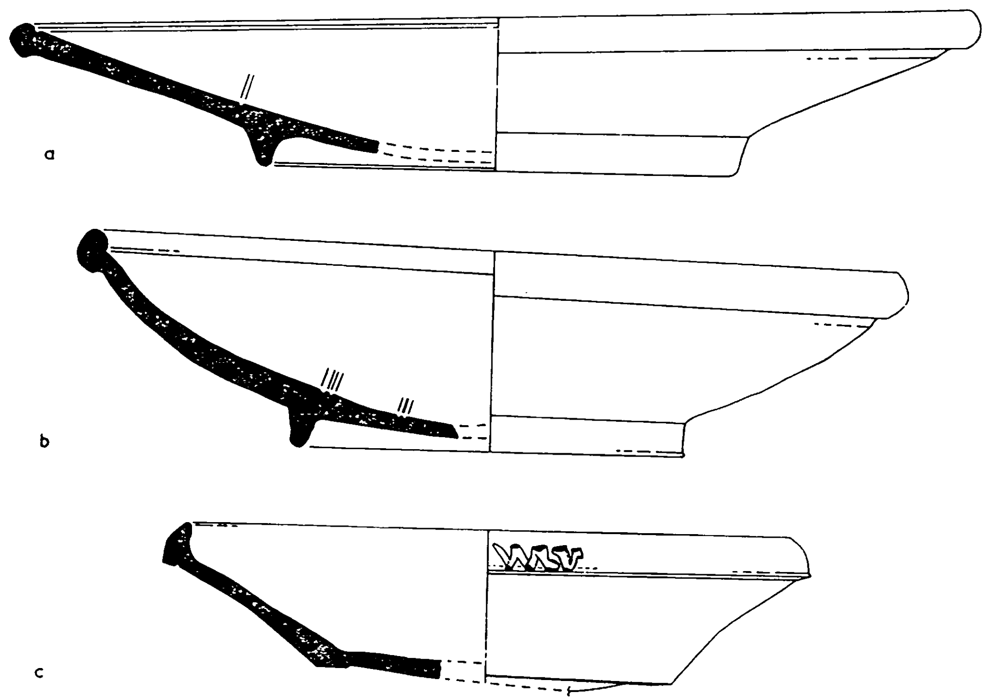


FIG. 89 Scale 2 : 5

on the floor (as on FIG. 89b); in a few instances this is combined with rough stamped decoration—palm-branches, incuse rosettes and the like (Delougaz (1960) pls. 31.2, 53.42; Abu Mena 66.998, etc.) A peculiar kind of decoration, often found on the exteriors of the knobbed rims of dishes and plates, consists of rows of small indentations apparently made by holding a cord against the vessel as it was rotated—a primitive kind of rouletting. Its presence has been noted by

[1] Cyprus Museum, from Nicosia (Ypsilantis site, 1950). For the shape, cf. Antioch shape 804u (and 802u, z?); Delougaz (1960) pl. 53.3–20.

[2] Myrtou (Cyprus) P 88, in Cyprus Museum stores. Cf. Delougaz (1960) pl. 53.2 (which is classed as 'soft tan ware').

[3] British Institute at Ankara excavations, under M. R. E. Gough (1963).

[4] Similar: Abu Mena 66.861; cf. also Antioch shape 802u–x.

[5] Delougaz (1960) pl. 53.21–22; similar frs. at Abu Mena.

Waagé on some of the Antioch finds.[1] I have noted examples at Abu Mena, along with pieces of *Egyptian B* which employ the same technique. The incised zigzag on the rim of FIG. 89c is a borrowing from its Cypriot prototype.

The ware appears to be found only in seventh-century contexts, and may, as Waagé suggests,[2] have arisen largely as a substitute for the other Late Roman wares as they disappeared from the market. It does not seem to have become common before *c.* 620, to judge by its absence in a group of the early years of the seventh century at Antioch,[3] though the few stamped dishes, which seem to be influenced by the African R.S. Form 104, may be earlier. The Kh. al-Karak pieces may date from around the middle of the century. At Abu Mena the ware is common in the latest levels (second half of seventh century?) along with *Egyptian A* ware, taking the place of the other Late Roman wares. The exact date of the three examples on FIG. 89 is not certain, but the Nicosia dish (FIG. 89b) comes from a well-group probably of the second half of the seventh century. *Egyptian C* may therefore have continued to be made until *c.* 700 or even later.

[1] Waagé (1948) 47, under shape 802, and fig. 28.16.

[2] *Ibid.* 58.

[3] *Ibid.* 57.

IX

GAULISH 'T.S. GRISE'

THE most important of the late Roman wares produced in the western Mediterranean is the so-called *t.s.* (*paléochrétienne*) *grise,* formerly known as 'Visigothic' ware.[1] It is common on sites in southern France and Spain. The ware derives basically from the South Gaulish tradition, though it has a good deal in common with African R.S. Ware; it appears to be the direct successor of Lamboglia's *t.s. chiara B* and *t.s. lucente.* It has recently been the subject of two important studies by Rigoir,[2] and will therefore be discussed only briefly here.

The characteristic fabric, which is of good quality, is grey, with a thin smooth grey or black surface coating.[3] Stamped decoration is very common, appearing on both the floors and the rims of open forms and on the exteriors of deep bowls; floral and geometric patterns predominate. Rouletting is often present on the flat rims of dishes and bowls, and is also used together with the stamped decoration on certain forms. An orange or orange-red version of the ware with similar stamped decoration is common; this has often been confused with African R.S. Ware.[4] The essential similarity between it and the grey version is perhaps best illustrated by the Vendres pieces shown in *CVA France 6*, where both varieties are illustrated side by side.[5] The orange ware seems to represent a late phase of Lamboglia's *t.s. chiara B* series, and to serve as a direct link between it and *t.s. grise* proper. The distribution patterns of all three wares indicate that they come from the same region, namely the lower Rhone valley or the vicinity of Marseille.

The vessel-forms of *t.s. grise,* as enumerated by Rigoir, seem to be mostly of local Gaulish origin. The common dish and bowl forms (Rigoir 1 and 3) are straight derivatives of Lamboglia's forms 4, 4/35, 4/36 and 4/46 in *t.s. chiara B* and *t.s. lucente,* where the practice of decorating the rim (with rouletting) is already well established. The notching of the rim common on Rigoir forms 1 and 3 probably derives directly from metalware rather than from the African wares, where the practice is not very common.[6] Bowls with decoration on the outside are also very numerous; most of these (Rigoir forms 6, 15–18) appear to be distant descendants of the earlier Gaulish form Dragendorff 37.[7] All of these basic forms occur in the orange variety of the ware.

[1] Following Déchelette (1904) ii 327–34, pls. XII–XIII, who claims Danubian origins for the ware. An account of previous study of the ware is provided by Rigoir (1960) 7–12.

[2] J. Rigoir, *La céramique paléochrétienne sigillée grise* (*Provence historique* x, fasc. 42 (1960)); *id.* 'Les sigillées paléochrétiennes grises et orangées', *Gallia* xxvi.i (1968) 177–244.

[3] See Rigoir (1960) 18–19.

[4] E.g. by Palol Sallelas (1949) 455–6, 466. The confusion is noted by Fouet (1961) 283.

[5] Mouret, *CVA France 6* (1927) pls. 50–54, excluding the pieces pl. 50.24–27, pl. 51.26, pl. 53.23 and 34, which on stylistic grounds may be classed as African R.S. Ware.

[6] Cf. the silver bowls of Drexel type 4 (see p. 283 n. 2).

[7] Cf. Rigoir (1968), table on p. 178.

The series may be divided on the basis of the stamped decoration into three major classes; these more or less correspond to Rigoir's 'groupe narbonnais/languedocien', 'groupe provençal' and 'groupe atlantique'.[1] These quite probably represent different phases in the development of the ware, though Rigoir views them rather as the products of different regions. In the first and earliest class ('groupe narbonnais'), typified by the finds from Vendres[2] and Montmaurin,[3] orange and grey specimens occur side by side in roughly equal numbers. Almost all of the stamped motifs have parallels in African R.S. Style A: palm-branches, circles, fringed circles, rosettes, grilles, crescents, etc.[4] The arrangement of those occurring on the floors of dishes is very similar to the arrangements found on the African ware. All this indicates direct copying of African products; any influence in the other direction is highly improbable, since to the best of my knowledge no examples of *t.s. grise* have been found in Tunisia, while R.S. Ware is not uncommon in southern France. The practice of placing stamps elsewhere than on the floor is, however, a purely Gaulish feature, the stamps in this case replacing the rouletting found on *t.s. chiara B*. The vessel-types recognizable among the Vendres fragments are Rigoir forms 1, 3, 6, 15, 16 and 18; a similar range is present at Montmaurin. The dating-evidence for this class is summarized by Fouet;[5] at Montmaurin and elsewhere it occurs in levels of the period *c.* 350–400+. This date-range accords perfectly with that suggested by the stylistic similarities with African R.S. Ware. It is possible that the grey fabric did not come into vogue until near the end of the period (i.e. around 400).[6]

A rather later class (Rigoir's 'groupe provençal'), comprising grey ware only, is represented by the finds from Marseille published by Rigoir and by many of those from St. Blaise.[7] On these, certain of the early stamped motifs—especially the palm-branch and the rosette—are enlarged and elaborated in a manner unparalleled on R.S. Ware to produce complex new geometric patterns (see Rigoir (1960) *passim*). Rigoir's drawings show a few new motifs, most of which can be matched on R.S. Ware (and *Late Roman C*) of the mid–late fifth century: the rinceau, diamond with volutes, running animals, and in one case a half-length human figure.[8] Crosses appear, and in one case rosette and rinceau stamps are arranged to form a large cross.[9] The class would thus appear to span most of the fifth century, running parallel with Styles A (iii) and D in the African R.S. Ware stamped series.

Finally, among the Marseille stamp types are a few with schematic animal decoration,[10] of a class better known from Bordeaux and elsewhere, and noted by Déchelette and others.[11] These pieces, which are distinct from the other two classes in both decoration and fabric, constitute Rigoir's 'groupe atlantique'.[12] The stamps of this class are mainly large, resembling medallions, with the figures standing out in relief on a sunken background. Typical examples show one or more schematic

[1] Rigoir (1968) 183 ff.

[2] See p. 402 n. 5.

[3] Fouet (1961) *passim.*

[4] See Appendix 3.

[5] Fouet (1961) 280–2.

[6] Rolland (1956) 57 indicates the absence of grey pieces in the destruction level of the earliest of the late antique buildings at St. Blaise, while the grey ware is common in a slightly later phase. Cf. Palol Salellas (1949) 466. At Montmaurin only some 30% of the pieces found are of the grey variety.

[7] Rigoir (1960) *passim*; Rolland (1951) 185–99; *id.* (1956) 74, figs. 49–53 *passim.*

[8] See Appendix 3.

[9] Rigoir (1960) no. 55, fig. on p. 37.

[10] *Ibid.* motifs 220–222.

[11] Déchelette (1904) ii 327 ff., pl. XIII 4, 5, 7; W. Unverzagt, *Praehistorische Zeitschrift* xvi (1925) 132–3, fig. 6.

[12] Cf. Rigoir (1968) 185.

stags at the centre, surrounded by fish, small human figures and crosses, with in some cases a retrograde inscription round the edge. These clearly owe nothing to the influence of African R.S. Ware, but may be regarded as a purely local development in a 'barbarian' style. They are associated with new vessel-forms (Rigoir 4 and 17), and are probably no earlier than the sixth century.[1]

T.s. grise was fairly widely exported, particularly in its two earlier phases. Rigoir's distribution maps indicate a high concentration of finds in the area around Marseille, where it was probably made, but show that the ware was common throughout southern France and north-eastern Spain, particularly in the coastal regions. At this stage, then, it may be regarded as a Mediterranean ware with a predominantly sea-borne pattern of distribution. Pieces have been found as far afield as Lixus (Morocco), Merida (S.-W. Spain), Cagliari (Sardinia), Cosa (Italy), and Corinth and possibly Athens in Greece (FIGS. 90d, 91e).[2] The distribution pattern of the third class, however, is radically different. This has its main concentration in western France, particularly in the Bordeaux region, and in view of the slight difference in fabric may well be a local product of that region.[3] In this last case the old name, 'Visigothic ware', is probably justified.

[1] Déchelette (1904) ii 328 records examples found with coins of Justinian. Cf. also Rigoir (1968) 192 (sixth-century material from St. Bertrand-de-Comminges).

[2] Lixus: Jodin and Ponsich (1960) pl. II (some examples). Merida: Zeiss (1933) 467, fig. 1.2. Cagliari: *NSc*, 1949, 260–1, figs. 34–35, nos. 103, 105 (orange series?). Cosa: several frs. from recent excavations. Corinth: C–35–708; FIG. 91e. Athens: possibly Agora P 12008 (see Rigoir (1968) 187); FIG. 90d.

[3] For Bordeaux origin: Rigoir (1968) 185; see also Béraud-Sudreau, *BAC*, 1938–40, 545. However, a few examples of similar type have been found at Marseille (see p. 403 n. 10).

X

OTHER LATE ROMAN WARES

A NUMBER of other closely related Late Roman wares occurring on Mediterranean sites are discussed in this chapter; and, in addition, the small but widely exported classes of Relief and Painted Wares, which are quite unrelated to the Late Roman wares.

MACEDONIAN 'T.S. GRISE'

This grey ware, showing remarkable similarities with that discussed in Chapter IX, figures prominently among Late Roman finds from Saloniki. Its exact relationship, if any, to the Gaulish *t.s. grise* series is not clear, but it seems from the quantities involved that we are here dealing with a distinct ware, probably produced in Macedonia. The fabric appears to be native to the region; forms and decoration may owe something to northern influences.

The ware, a fine-grained grey clay loaded with fine silvery mica particles, has a thin grey or grey-black surface coating with a satiny or rather metallic texture; it bears a marked resemblance to the so-called Aeolic Bucchero of the Archaic Greek period.[1] Typical forms are flat-rimmed dishes and bowls with stamped decoration on the floor and the rim, which is often also finely scalloped or notched around the edge; both forms recall Gaulish *t.s. grise* pieces (FIG. 90a,c; cf. Rigoir forms 1 and 3). Also common, as in the Gaulish series, are deep bowls with stamped decoration or wavy incised lines on the outside; some of these have handles. Skillets and closed forms, including screw-necked jugs, and lids with high screw-decorated knobs are also represented. Some of these shapes seem to have northern connections, in particular the handled bowls, which may be versions of a three-handled series common on Danubian and Dacian sites. The stamped decoration (FIG. 91 a–d) seems vaguely related to that on the African series, which may have inspired the decorative schemes on the dishes. A few typical fragments of the ware, from Saloniki, are published in *ADelt* xxi (1966) Chronika, pl. 355d.[2]

This ware seems to have had mainly a local distribution in Macedonia, though a few pieces have been found in Athens,[3] Corinth[4] (FIG. 90a–b=FIG. 91a–b) and possibly Constantinople.[5] It does not appear to have had any significant northward

[1] The presence of wares of similar appearance in the northern or north-eastern Aegean and the Marseille area in *both* Archaic Greek and Late Roman times is worthy of comment. For Aeolic Bucchero, see W. Lamb, 'Grey Wares from Lesbos', *JHS* lii (1932) 1–12, pl. I, and *Troy* iv 252–3, 264 ff., fig. 291ff.; for similar wares at Marseille in the sixth century B.C., see F. Villard, *La céramique grecque de Marseille* (Paris 1960) 59, 65–66, pls. XXXVI–XXXVII (recognized as local products).

[2] Described by Petsas as 'terra nigra'. They come from the building described by him on p. 338 (with pls. 345a, 347b).

[3] Agora P 687, P 11987, P 12047 and P 2982.

[4] Corinth C-33-1415, C-65-185.

[5] See *DOP* xxii (1968) 212, no. 85, fig. F.

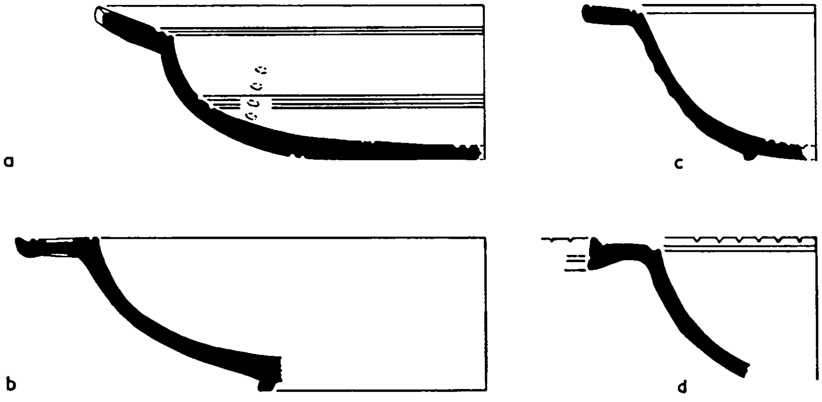


FIG. 90 Scale 2 : 5

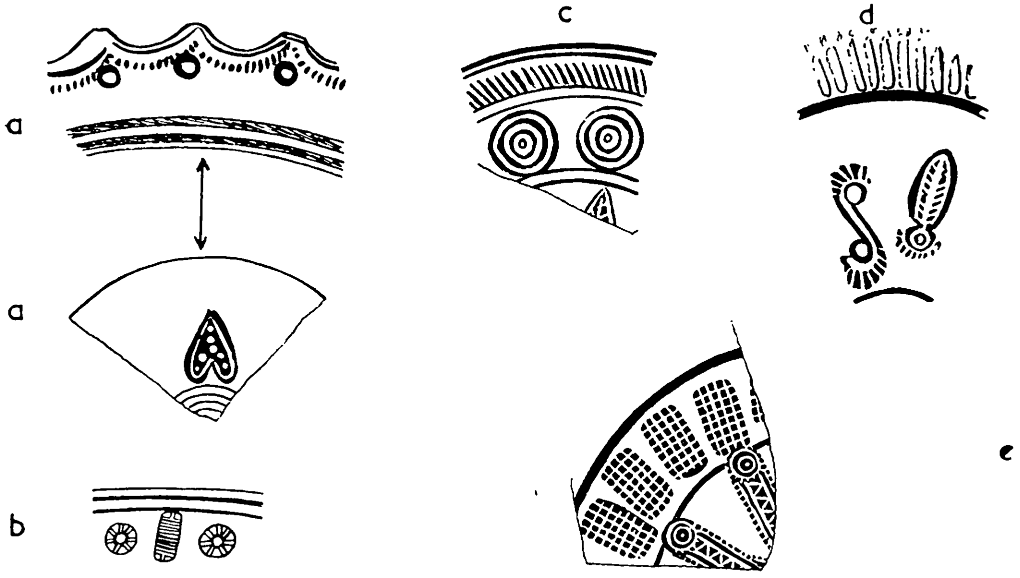


FIG. 91 Scale 2 : 3

distribution; a few stamped pieces from Rumanian sites may, however, belong to the series.[1]

A date for the series around the late fourth and early fifth century is indicated by both the fragments from Athens, which were associated with late fourth-century coins, and the discovery in Saloniki of a large group in association with African and *Late Roman C* pieces of late fourth- to early fifth-century types.[2]

ATHENIAN WARE

Though not strictly speaking a fine ware, the local Athenian colour-coated ware of Roman times deserves a mention here on account of its close connections with African R.S. Ware. From the middle of the third century, when the North African wares first became common there, the Athenian factories produced copies of them; prior to this, Çandarli ware had exerted some influence. The Athenian potters of the third and fourth centuries were, however, subject to a variety of other influences, and alongside imitations of these two wares produced a wide range of colour-coated vessels with white painted and applied decoration and a number of plastic vases.[3] The same workshops also made great quantities of lamps in a distinctive style.[4]

This ware is one of the few Mediterranean wares of the period whose place of manufacture is absolutely certain, for several of the kilns which produced it and a vast accumulation of potters' debris were brought to light over fifty years ago in the course of the German excavations in the Kerameikos at Athens.[5] The Kerameikos material dates mainly from the fourth century, and was partly published by Kübler in his article of 1931 (see Bibliography). Further kilns of similar date have been found more recently elsewhere in the city,[6] and a number of scattered wasters from these or other workshops were discovered in the course of the Agora excavations.[7]

The typical Athenian fabric is rather coarse and thick, and is partially covered with a dull colour-coating, mostly dark in tone. Differences in firing produce an almost infinite range of colours in both the body-clay and the slip coating. The finish is rough, often with deep scratches on the exterior surface; no moulds were used for the standard wares.

The numerous finds from the Agora excavations demonstrate clearly the sequence of outside influences on the ware. Imitations of Çandarli ware Forms 3 and 4 are common in deposits up to A.D. 267.[8] The series of imitations of African R.S. Ware forms begins in the mid third century, the first to appear (pre-267) being copies of Form 48 (rare) and Form 50 (common).[9] The latter type is still common in the early fourth-century deposits, where it is joined by copies of Form 58. Plain adaptations of Form 59 appear slightly later. Around the middle of the fourth

[1] *Mat. și cerc. arh.* i (1953) 712, no. 4, fig. 13h, from Sucidava, is particularly close to the Saloniki examples; for other possible pieces, see *loc. cit.* no. 5, fig. 13 i; *ibid.* 796, fig. 7.2 and 9 (from Hoghiz); *id.* ii (1956) 175, figs. 115.1–2,6, 116.2 (from Cristești); *Dacia* vii–viii (1937–40) 383, no. 9, fig. 13 b (from Sucidava).

[2] See p. 405, note 2. From same group: Petsas, *op. cit.* pl. 350 γ (LRC) and ε (African R.S.), and the material noted on p. 326–7 above.

[3] See Robinson (1959) *passim*.

[4] See Perlzweig, *Athenian Agora* vii (1961) *passim*.

[5] *AAnz.*, 1916, 158; *Ath. Mitt.* liii (1928) 181–2.

[6] *Athenian Annals of Arch.* i.3 (1968) 224–9.

[7] Unpublished to date.

[8] E.g. Robinson (1959) K 29–31, 35, 46–7; M 113, 141–2.

[9] E.g. Robinson J 33, K 36–41.

century, perhaps *c.* 340–350, stamped decoration begins to appear, and in the hundred years or so that follow stamped dishes are very common. These dishes bear a wide range of motifs, almost all floral or geometric in character; for a representative selection see Kübler (1931) Beil. XXIX–XXXV. Both the stamp types and their arrangements mirror those of R.S. Ware Style A, and may be assumed to be directly copied from the African wares. Two basic vessel-forms are present: (1) a dish with a flat moulded rim (cf. African R.S. Form 59),[1] and (2) a dish with an incurved or rounded rim, sometimes bevelled on the outside (cf. R.S. Forms 61, 62, 64).[2] After the middle of the fifth century a decline sets in and the main stamped series comes to an end. The latest deposits in the Agora to contain appreciable quantities of the stamped ware date from the third quarter of the fifth century; from one of these comes the only known example bearing a stamp in the form of a cross.[3]

In general, Athenian ware has a local distribution only, though sporadic examples occur in northern and western Greece (e.g. Saloniki, Corfu) and in Cyrenaica (Tolmeita, Tocra). Only in nearby places such as Corinth is it found in any great quantity. The finds from further afield presumably reached their destinations in company with Athenian lamps, which were widely exported in the third and fourth centuries.[4]

ASIA MINOR FABRICS

A distinctive light-coloured ware is present in small quantities on a number of sites in the Aegean area and beyond in fifth-century and later contexts. Some typical examples from the Athenian Agora and Itanos in E. Crete[5] are shown on FIG. 92. This ware, which has various features in common with *Late Roman C* ware, appears to originate from a centre in the eastern Aegean. In fabric it shows a marked similarity to certain earlier Roman products made in the Knidos region[6]—which may indicate its source. The clay is fine-textured, normally light orange or light brown (occasionally fired grey), with a thin slip of a darker shade of the same colour. In some instances traces of gold mica are visible; breaks are generally quite clean. Exteriors are smooth, sometimes showing tooling-marks, and interiors generally display fine brush-marks. Most of the profiles are angular, with sharp-cut feet, often accentuated by grooves along one or both sides (see FIG. 92, 2); groups of sharply incised grooves (as on FIG. 92, 5) are a common feature. A fair number of vessel-forms may be distinguished, though few complete profiles are extant and it would be premature to attempt any corpus of them here. Some of these appear to be derived from *Late Roman C* forms: a shallow dish with a vertical or hammerhead rim, rouletted on the outside (FIG. 92, 1)[7] a dish with knobbed rim,[8] a flat-rimmed

[1] Cf. Kübler (1931) fig. 1.1–4 and Beil. XXXV, 2; Robinson pl. 70, P 11186.

[2] Cf. Kübler (1931) fig. 1.5–10, fig. 2, Beil. XXXV, 1; Robinson pl. 70, L 59 and P 12009; pl. 71, P 8651 (late).

[3] Agora P 2096.

[4] For the export of Athenian lamps, see Perlzweig, *op. cit.* 65–69.

[5] In Knossos sherd collections.

[6] Notably the *oinophoroi* and relief-decorated vases noted briefly on pp. 411–12.

[7] For type with hammerhead rim, see Aharoni, *Ramat Raḥel, 1961–62*, fig. 7.22; two similar frs. from Abu Mena (cat. 67.14–15) and Pergamon excavations, certainly of this ware.

[8] *DOP* xxii (1968) 211, fig. F, no. 73, from Istanbul.

dish with grooves or rouletting on the rim (FIG. 92, 4).[1] Others are unparalleled (e.g. FIG. 92, 2, 3, 5). A few fragments of high-footed dishes also occur (as FIG. 92, 7). To these may be added a series of small bowls and some pieces of closed forms.[2]

On the basis of decoration two main classes may be distinguished. The first is characterized by bands of multiple rouletting executed with multiple-toothed implements, similar to that found on *Late Roman C*; in this case as many as eight rows of tiny parallel triangular notches may be present (cf. FIG. 92, 4, 7). As on *Late Roman C* this rouletting appears on both rims and floors, and is sometimes combined with stamps. Multiple grooving (as on FIG. 92, 6) is an alternative form of decoration. The known stamp types include *planta pedis* and diamond motifs with dotted centres, and one or two simple crosses. Related to this first class are a number of undecorated types.

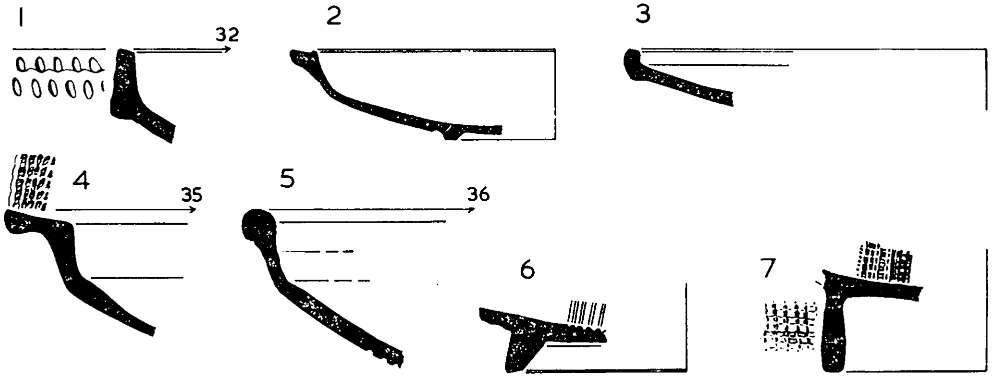


FIG. 92 Scale 2 : 5

A second class, represented to date by a handful of examples only, has a more ambitious scheme of decoration. The outlines and details of the decorative motifs are incised through the slip in sgraffito technique, and the slip is scraped away from the areas around them to produce a 'pseudo-black-figure' effect, with a light-coloured background and darker motifs with incised details. A number of fragments, of which the best is the dish fr. *DOP* xxii (1968) 211, no. 78, figs. F and 20,[3] appear to show hunting scenes of typical Late Roman type, rendered in a rather curious and and crude manner. One small dish from the recent Sardis excavations, decorated in similar technique, bears a large central cross (PLATE XXIII*a*).[4] These pieces are clearly pottery copies of Early Byzantine decorated silverware;[5] they are unique among Late Roman wares.

The date-range of the ware as a whole seems to be roughly mid fifth–early seventh century. FIG. 92, 1, a close copy of *Late Roman C* Form 3B–C, should be

[1] Cf. *ibid.*, no. 75.

[2] *Ibid.*, no. 77, etc.

[3] Also *DOP* xxi (1967) 278, fig. 23; *id.* xxii (1968) 211, no. 79.

[4] Prof. G. M. A. Hanfmann has kindly permitted me to illustrate this piece, which is unpublished.

[5] Cf. Dodd (1961) *passim*.

one of the earliest products. Several typical examples of the first class occur in the groups of the third quarter of the fifth century from Athenian Agora; they include FIG. 92, 2. The Istanbul fr., *DOP* xix (1965) 235, fig. D 10, is probably of similar date. FIG. 92, 4 and 7, are from other Agora groups of the fifth century. The frs. of a dish with the developed hammerhead rim[1] were found in the predominantly early sixth-century 'Kom' group at Abu Mena. The Istanbul pieces, *DOP* xxii (1968) 211, nos. 73–77, fig. F, should represent the later phases of this series; they probably belong mostly to the latter part of the sixth century. FIG. 92, 3, 5, 6, may be compared with these. The date-range of the second class is not so clear, but since the silverware vessels which they copy range in date between the reign of Justinian and the early seventh century, they are probably of similar date. The Sardis piece, which differs somewhat from the rest, comes from an early seventh-century context.

In addition to this ware, mention may be made of two others from the region: a series of colour-coated vessels with stamped decoration, probably of local manufacture, from Sardis,[2] and a fine-textured red-slipped ware, perhaps a derivative of African R.S. Ware, found in some quantity in Istanbul.[3] The latter, which seems to be mainly of seventh-century date, may come from Pontus or the neighbouring regions, and is related in fabric to earlier Roman wares from the Black Sea region; a single piece from Istros may be related to the Istanbul finds.[4]

PALESTINIAN WARES

A small group of stamped imitations of African R.S. Ware may be distinguished in Jordan. The best examples are two vessels in Amman, which are illustrated on FIG. 93.

1 From Jerash(?). D. 28·3. Buff to orange clay, of finely granular texture, containing some lime and small quartz particles. On inside, orange to red slip, slightly lustrous, tending to flake off; surface rather pimply. Outside plain, smoothed with brush.

2 From Jebel Qala'n. D. 28·2. Light orange clay, with profuse quartz and other grits (black, brown and red), giving a sandy appearance; traces of lime, no mica. Deep orange slip, matt and tending to flake, covering inside and rim. Fine brush-marks on outside.

These pieces, which imitate R.S. Ware Forms 58 and 67 respectively, probably date from the latter part of the fourth century, the stamped decoration being a modification of R.S. Ware Style A. Of note is the appearance of stamps on a copy of Form 58, which itself is never stamped. A third fragmentary example of the ware in Amman, also copying Form 58, is unstamped. A few fragments from the American excavations at Araq el-Emir are similar; these include rims as **2** above, some found in contexts antedating A.D. 365.[5]

For a later series which may be of Palestinian origin, see *Egyptian C* ware above.

[1] See p. 408 n. 7.
[2] Recent excavations, unpublished.
[3] *DOP* xxii (1968) 212, nos. 87–99, fig. G.
[4] *Mat. şi cerc. arh.* vi (1959) 277, fig. 3.1.
[5] Shown to me in Jerusalem by Dr. P. Lapp.

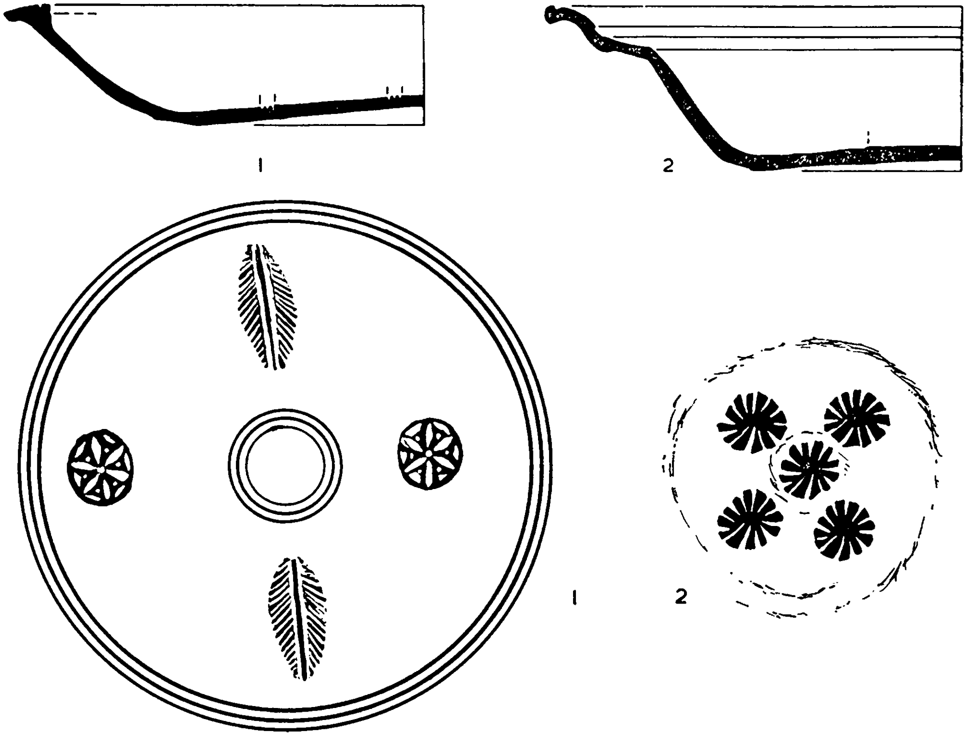


FIG. 93 Top—Scale 2 : 5 Bottom—Scale 2 : 3

RELIEF WARES

Two classes of second- to third-century date are of more than regional importance. The first comprises a wide range of mould-made vessels, including a series of one- and two-handled flagons with relief decoration—the so-called 'oinophoroi' (PLATE XXII *a*),[1] a number of low carinated flagons,[2] animal-handled paterae with medallion decoration,[3] and plastic vases in the form of rams,[4] satyr-heads, etc.[5] These share the same fabric (a hard fine-grained orange or grey clay containing some lime and a little golden mica, with a thin metallic varnish-like slip), and are mostly made in two-part moulds, in the manner of terracotta figurines. They may originate from

[1] Main studies: S. Ferri, 'Intorno al problema degli "Oinophoroi"', *Bollettino dell'associazione internazionale degli studi mediterranei* iv. 4–5 (Oct. 1933–Jan. 1934) 16, pls. XII–XIV; E. B. Bónis, 'Die Verbreitung einer Gruppe von späthellenistischen Reliefgefässen in den römischen Provinzen', *Arch. Értesítő* lxxix (1952) 23–32, pls. I–III; V. Hausmann, 'ΟΙΝΟΦΟΡΟΙ', *Ath. Mitt.* lxix/lxx (1954–55) 125–46, Beil. 43–53; *id.*, 'Iterum Oinophoroi', *Ath. Mitt.* lxxi (1956) 107–12, Beil. 61–64.

[2] A. Greifenhagen, *Beiträge zur antiken Reliefkeramik* (*JdI* Ergänzungsheft 21 (1963)) 66–76.

[3] Notably Berlin 4904 (Zahn, *AAnz*, 1909, 559–69, with fig. in text); cf. also E. Breccia, *Bull. Soc. arch. Alexandrie* xi (1909) 298–320.

[4] E.g. *NSc*, 1954, p. 322, fig. 24.3; *Sov. arch.* 1962.1, pp. 201–2, fig. 5; *ADelt* xxi (1966) *Chronika* pl. 361 e.

[5] For a fine example, see *Art Treasures of Turkey* (exhibition, 1967) no. 144 (Istanbul 7125, from Balikesir).

the Knidos region of Asia Minor, for their fabric is similar to that of the early Roman Knidian lamp series, and numerous examples have been found there.[1] They were exported widely, for examples have been found in various parts of Italy, along the Danube frontier, and in South Russia, as well as throughout the eastern Mediterranean.[2] The series appears to date mainly from the second and early third centuries, though some of the plastic vases may be earlier.[3] The animal-handled bowls copy a late first- to early second-century metalware type.[4] A late second- to early third-century date has been proposed for the *oinophoroi.*[5] A number of imitations were made in North Africa in the third century;[6] the *oinophoroi* and animal-handled bowls were revived at Pergamon and Athens at a later date (late third–early fourth century).[7]

The second class is composed of a series of relief-decorated bowls of Corinthian manufacture, which have been studied by Spitzer (PLATE XXII *b*).[8] These, which date from roughly 200 to 250, are crude copies of metalware, the counterparts of such pieces as Form 35.1 in African R.S. Ware. The bowls, despite the poor quality of their decoration, had a fairly wide market; examples have been found as far afield as Sousse[9] and Sabratha[10] in North Africa, Ostia,[11] Aquileia,[12] South Russia[13] and possibly also Alexandria.[14]

Relief decoration in the form of medallions also occurs on a small group of Athenian products of the third century.[15]

PAINTED WARES

These are in general rare in Mediterranean countries throughout Roman times. The most significant exceptions are a class of mugs with white-painted decoration (leaf-bands, spirals, mottoes, etc.), probably Italian, found in the late second and early third centuries,[16] and the related Athenian white-painted series.[17] The former

[1] Many frs. in British Museum, from old excavations (Newton).

[2] See bibl. cited on p. 411 nn. 1–5.

[3] A head-vase occurs at Polis in Cyprus in a late Augustan group (tomb 104).

[4] For the type (including a list of examples with medallions), see Y. Yadin, *The Finds from the Bar-Kokhba Period in the Cave of Letters* (Jerusalem, 1963) 58–63, pls. 17, 27, with bibl. cited.

[5] Hausmann, *Ath. Mitt.* lxix/lxx (1954–5) 138. The dating proposed by Bónis cannot be accepted.

[6] The Navigius series (carinated flagons, two-handled flagons, head-vases): see Merlin, *BAC*, 1917, ccix–ccxv, pls. XXXV–XXXVIII; *id.*, 1918, clxxiv–clxxxiii; *id.*, 1920, pp. 21–28. For a ram-vase of similar fabric, see Salomonson (1968) 138, fig. 51. Some of the pieces listed by Greifenhagen (see p. 411 n. 2) belong to this group.

[7] Pergamon: 'oinophoroi' from Musalla Mezarlik excavations (unpublished). Athenian animal-handled bowls: *Hesperia* ii (1933) 193; Waagé (1933) 306–7, fig. 6; Robinson (1959) 103, M 209–10, pls. 26, 37, 71.

[8] D. C. Spitzer, *Hesperia* xi (1942) 162–92. See also Robinson (1959) J 31, pl. 9.

[9] *BAC*, 1902, p. 412, fig. 1; *Cat. Alaoui* (1910) no. 727.

[10] Two examples in Museum (unpublished).

[11] *Ostia* i (1969) 62, pl. VI, 116–18, pl. LX, 744–74. Cf. also Vatican, Museo Sacro 1350, 1351, from Rome.

[12] G. Brusin, *Gli scavi de Aquileia* (1934) 170–1, 183–4, with figs. in text. Same region: *NSc*, 1950, 11–12, figs. 9–10, from Lucinico (Gorizia).

[13] *Materiali* 85, pp. 312–6, from Tiritaka.

[14] *Sieglin Exped.* ii.3, 197, pl. XXIII.

[15] Robinson (1959) K 17, L 63, pl. 36; Perlzweig (1961) 60–1, pl. 47, bottom (with refs. cited).

[16] E.g. *NSc*, 1913, pp. 271–2, fig. 14; *AJA* xxxvii (1933) 569, fig. 13 left; Holwerda (1936) no. 761; *NSc*, 1954, 272, fig. 1; *NSc*, 1960, 422, fig. 3 b; *NSc*, 1965, 334, fig. 9; *Meligunìs-Lipára* ii pl. 222.8, 10; *Ostia* i 66–7, pl. VII, 149, pl. LXI, 792–840.

[17] Waagé (1933) 305 ff., figs. 5–6; Robinson (1959) 61, K 19, with other examples cited, pls. 37, 39, 57, and *passim*. A number of decanters have both white and brown decoration; cf. Robinson (1959), pl. 57.

may be derived from contemporary Rhenish wares. The Athenian series, which runs from early in the third century until well into the fifth, comprises mainly bowls and closed vessels with white running spirals and the like. Some local products from elsewhere in Greece[1] copy them.

A number of fine dishes and bowls with dark painted decoration occur on Greek sites in roughly sixth-century contexts. The finest example is a dish from Delphi (*BCH* lxxiv (1950) 327, fig. 29) here illustrated on PLATE XXIII *b*. The ware is a light brown of a fine consistency, with brown or sepia paint; the decoration consists of radiating leaf-sprays or the like. A Central Greek origin seems likely, since many of the plain wares from the late levels at Delphi are of similar fabric. A few examples have been found in Athens and Saloniki; single pieces occur in Constantinople and at Abu Mena in Egypt.[2]

Various painted wares were made in Egypt and southern Palestine throughout the period in question. A series of plates decorated with painted fish, of Upper Egyptian manufacture,[3] may be noted as the predecessors of Egyptian R.S. 'A' Ware (see pp. 387–97 above). Other painted wares, mostly coarse, were made throughout the East in the sixth and seventh centuries. Some late painted wares are also reported from Sicily. The distribution of these is in general very limited.

[1] In Macedonia, and perhaps also in Thessaly and at Argos (unpublished examples).

[2] Constantinople: *DOP* xxii (1968) 212, no. 82, fig. F. Rest unpublished, based on personal observation.

[3] Examples: Winlock and Crum (1926) pl. XXXIII B; Emery and Kirwan (1938) 30, pl. 114, type 89; Mond and Myers (1940) pl. XXV bottom r., and pl. LXXV top l.; W. M. F. Petrie, *Ehnasya 1904*, pl. XXX no. 4; also Toronto 910. 165.445–446 (unpublished). Cf. also the Brooklyn Museum dish (J. D. Cooney) *Late Egyptian and Coptic Art* (Brooklyn Mus., 1943) pl. 36, and *Tell Edfou, 1938* 23–4, pl. XXXIII.

XI

DISTRIBUTION

THE overall distribution pattern of the wares enumerated above and the changes which it underwent from century to century may now be surveyed. A necessary prerequisite to any such survey is, of course, a fairly precise chronological framework for the wares in question; this I have attempted to provide in the chapters above, together with some indication of the general distribution of each ware.

The distribution patterns of some of the more common forms and series in African Red Slip Ware and *Late Roman C*, and of the other wares taken as a whole, are indicated on MAPS A 1–18 and B 19–36. The first series shows the site distribution of published specimens and of such unpublished pieces (mainly from the eastern Mediterranean) as are known to me; the second series gives an estimate of those areas in which these wares appear to be common on the basis of known finds, bearing in mind the fact that the finds from many regions are very inadequately documented. A comparison of the two sets will thus indicate whether a piece appears to be a rarity or of common occurrence on any given site.

The one fact which emerges clearly from these is the extremely wide distribution of certain wares around the shores of the Mediterranean, particularly marked in the case of African Red Slip Ware, which for much of the Late Roman period is the dominant ware throughout the region. This should come as no surprise if one considers the equally wide market enjoyed by Arretine ware in early Imperial times, and, at an earlier stage, by Attic wares. The same factor applies in all cases: the sea provided a cheap route for the transportation of these wares in bulk, and they were therefore competitive on all markets. On the other hand, the expense involved in overland transportation prevented them from penetrating deeply into the hinterland, except where (as in Egypt) a suitable river aided movement or (as in western Libya) there was no comparable local product available. Scarcely any examples occur in the northern provinces or in inland Spain and Anatolia, where wares of a different character dominated the market.

The pattern of use of the various Late Roman fine wares in the different parts of the Roman world between the second and the seventh centuries A.D. may now be examined in detail, region by region. A bibliography of the published material from each of these areas is given in Appendix 1 below.

North Africa (Tunisia, Tripolitania, Algeria, Morocco)

The home of African Red Slip Ware. For the distribution patterns within the area of the various classes of the ware, see MAPS A 1–12 and B 19–30 and the remarks on pp. 297–8; for local variants see Chapter III. Importation from outside

virtually ceases after *c.* A.D. 80; prior to this Italian and Gaulish TS were both widely used.[1] Apart from small quantities of *t.s. grise* and one or two stray pieces of *Late Roman C* from Moroccan sites[2] the other Late Roman wares are totally absent. The southward penetration of the Red Slip Wares in Libya is of particular interest; examples of all periods are numerous in the Fezzan,[3] reflecting current trends in Tripolitania, with the distinctive 'Tripolitanian Red Slip Ware' well represented in the fourth and fifth centuries.

Spain and Portugal

Along the Mediterranean coast African R.S. Ware is common, if not the dominant ware, from the early years of the second century onwards. In the rest of the country it was shut out by the local Spanish T.S., which, as is now known, continued to be made until the late fourth century.[4] On its decline the North African products and *t.s. grise* seem to have enjoyed a brief vogue; these now appear on sites in the west. The former comprise mainly stamped vessels of Style A; the latter, common mainly in the north-east (e.g. at Ampurias), are copies of these belonging mainly to the early series (see p. 403). By the middle of the fifth century the flow of imports seems to have fallen off again; thereafter the finds, predominantly African R.S. Ware, are mostly from sites along the Mediterranean coast. A few scraps of what may be *Late Roman C* occur at widely scattered points;[5] these together with the Moroccan finds, seem to provide a tenuous link with the finds from Britain (see below).

Southern France

The decline of the South Gaulish T.S. factories in the years after A.D. 100 and the northward movement of the main production centres of red-gloss wares resulted in a considerable influx of African R.S. Ware along the Mediterranean coast. During the course of the second century, however, a local derivative of the Gaulish red-gloss wares, Lamboglia's *terra sigillata chiara B*,[6] probably made in the Rhone valley or Marseille region, came to supply most of the local demand, and the African wares henceforth took a second place. *T.S. chiara B* (and the related *T.S. lucente*[7]) was supplanted, in the fourth century, by the stamped *t.s. grise,* also of local manufacture. The latter, which was widely exported, was the standard fine ware in the region from the mid fourth century until some time in the sixth century, as is shown by the sequence of finds from Marseille, St. Blaise, Vendres and elsewhere. During this period only a small amount of African R.S. Ware was reaching the coastal regions

[1] For a Neronian group with examples of these wares, see J. Baradez, 'Nouvelles fouilles à Tipasa: tombe d'un sacrificateur', *Libyca* v (1957) 221–75.

[2] Jodin and Ponsich (1960) 313, figs. 14, 16; Posac Mon (1964) 327–8, fig. 3.2–3.

[3] I am indebted to Mr. C. M. Daniels for showing me the finds from his recent survey work in the region, which include a very high proportion of these wares. Further examples in the Sebha Museum. The better preserved examples appear in the type-series above. Lady Brogan has kindly shown me material from sites in southern Tripolitania, which reveal a similar pattern, providing a link with the coastal regions.

[4] A mid fourth-century group from Lancia is published by F. Jordá Cerdá, *Excavaciones arqueológicas en España* i, *Lancia* (1962) 24–29, pls. I–II.

[5] See Appendix 1, under Ampurias, Barcelona, Bracara Augusta, Formentera, Pollentia and Tarragona.

[6] For the basic study of this ware, see Lamboglia (1958) 297–330.

[7] See Lamboglia (1963) 163–179.

around Marseille, though further east (e.g. at Ventimiglia) the ware was more common. The local *t.s. grise,* in its later phases, seems to have become popular in western France (e.g. at Bordeaux), while at the same time largely disappearing from its Mediterranean markets. No African products are known to have accompanied it, if we exclude a solitary dish found at Orléans.

Balearics, Corsica, Sardinia

African R.S. Ware seems to have been the standard ware throughout later Roman times, though a few pieces of *t.s. grise* are recorded from as far afield as southern Sardinia. Some Gaulish wares are recorded from Sardinia, but these may have been superseded at an early stage by the Tunisian products.

Italy, Sicily

The evidence from here is far from complete; virtually nothing is published from the west coast or the Po valley, and very little from the south. Most of what appears below is based on the finds from the region round Rome, from Cosa and from Ventimiglia.

Italy, strangely enough, seems to have produced no fine pottery of its own after the decline of the *terra sigillata* industry, which I date to around the time of Hadrian.[1] From this time onwards African Red Slip Ware supplied virtually the whole of the demand for tablewares, including the enormous market of Rome itself. The earliest pieces antedate the disappearance of the local T.S. wares, and may in part have hastened their decline;[2] the latest date from around A.D. 600. Finds from Rome and Ostia and from the South Etruria Survey[3] show that vast quantities of North African pottery were imported during the second and third centuries; thereafter the quantity seems to decline, but the source remains the same. A similar pattern is in evidence at Cosa. At Ventimiglia the African wares shared the market with the Gaulish *t.s. chiara B* and its successors. The as yet scanty evidence from the south suggests that *Late Roman C* ware may have been common there in the fifth and sixth centuries, depriving the African wares of their previous monopoly in the region; examples of the ware occur in eastern Sicily, Malta, Lucania and Apulia.[4] Whether it also penetrated up the Adriatic coast has yet to be established, though this seems highly probable. In contrast, only sporadic finds occur on the east coast: a handful of fragments at Cosa and one possible piece from Ventimiglia. Among other rarities one may note one or two late Çandarli ware sherds from Ostia and Cosa, and pieces of Tripolitanian R.S. Ware from Sicily and Francolise in Campania. The latter ware occurs in greater quantities in Malta.

Dalmatia

The finds from Višići indicate that here, as in Italy, African R.S. Ware dominated the market from the early second century onwards. *T.s. chiara* is stated to have

[1] Apart perhaps from a small group of imitations of silverware (see Toynbee (1957) *passim*), whose origin is uncertain.

[2] Lamboglia (1958) 295–6 indicates a date of *c.* A.D. 90–100 for the first major influx of the ware into Italy.

[3] In the British School at Rome; see Appendix 1.

[4] Sicily: Syracuse and Caucana (unpublished). Lucania, Apulia: sherds from several sites in Taranto Museum and the British School at Rome.

constituted some one-third of all the finds from this site,[1] which dates mainly from the second and third centuries. North African wares would appear to have remained popular in later times also, to judge by some stamped fragments published from other sites, and some pieces from Doclea may indicate the presence of local imitations. Examples of *Late Roman C* ware are reported from Split; finds further south (see below) suggest that it too may have been common in the area. A fine late fifth-century African plate from Salona is the latest published piece from the region. The complete lack of finds of Mediterranean wares in other parts of Jugoslavia shows that they did not penetrate beyond the coastal region.

Greece and the Aegean[2]

Round the Aegean Çandarli ware is the commonest fine ware from about the middle of the second century, when it ousted the latest *Eastern Sigillata B* products, until well on in the third century. A fair amount of this ware has been found in Athens (where it had local products to compete with), and a great deal on sites such as Knossos in Crete. African R.S. Ware remains rare until about the middle of the third century, when the fine versions represented by my Forms 45 and 48–50 suddenly sweep the market. Form 50 alone accounts for over half of the fine-ware imports found in the Herulian (A.D. 267) levels in the Athenian Agora, and a similar pattern occurs elsewhere in Greece. Henceforth Çandarli ware has only a minor role to play in its home region (around Pergamon).

Down the west coast of Greece the situation is appreciably different, with, in all probability, substantial importation of African wares from quite early in the second century. At Corfu the ware is common in an early third-century group, and a fair amount is present at Corinth in contexts as early as the middle of the second century. It did not, however, get past the Isthmus until later.

From the middle of the third century until the early fifth century African R.S. Ware is the standard fine ware almost everywhere, giving rise to a number of imitations. In deposits of the late fourth century moderate amounts of *Late Roman C* ware begin to appear alongside it on sites throughout Greece (Saloniki, Athens, Corinth, Corfu, etc.); presumably this is true of the eastern Aegean (its home region) also, though for the moment evidence is lacking. At the same time Macedonian *t.s. grise* begins a brief period of popularity in the north, with exports on occasion as far south as Athens and Corinth (see p. 405). Athenian stamped and painted wares of fourth to fifth century date have been found on a number of sites, though Corinth is the only place outside Attica where they occur with any regularity. A single sherd from Corinth may be classed as Gaulish *t.s. grise* (see p. 404).

Around the middle of the fifth century, as is shown principally by finds from Athens, the situation again changes dramatically. A sharp decline occurs in the importation of the African wares, and *Late Roman C* everywhere takes its place. In

[1] Čremošnik (1962) 138; hence the suggestion of a local origin for the ware. The figure quoted includes a certain amount of Eastern Sigillata B ware, which is confused with it.

[2] For a previous summary of the wares in this region, see my article, 'Notes on Roman Pottery in Greece and the Aegean', *RCRF Acta* v–vi (1963–4) 31–6. Much of the material cited below remains unpublished; select pieces are listed in the Catalogues above.

deposits of the second half of the fifth century in the Athenian Agora the proportion of African wares among the imports as a whole drops to a mere 10–20%, in the main fine pieces of Forms 82–84 (which appear to be commoner here than in the Western Empire). In the early sixth century the position is much the same. Only in the middle years of the sixth century does a resurgence occur; from then onwards African wares account for some 30% of the fine wares in the Agora groups, while *Late Roman C* retains the bulk of the market. Much the same seems to be true elsewhere in Greece, for instance at Saloniki in the north, Corfu in the west, and on Cretan sites. What slight evidence there is from the eastern Aegean at this period suggests that *Late Roman C*, as might be expected, had a near-monopoly in those parts, though the finds from Emporio in Chios show that a fair amount of African R.S. Ware was reaching some places as late as the seventh century. In the south-eastern Aegean, particularly at Xanthos, Cypriot R.S. Ware of sixth- and seventh-century types is also common, indicating that here all three major wares were in active competition for the market. Cypriot R.S. Ware occurs in quantity among the Emporio finds, and appears to have circulated in eastern Crete; small quantities of the ware occur throughout the Aegean region from early in the fifth century onwards, and stray pieces have turned up as far afield as Corfu. Another ware found in small quantities all over the region is the light-coloured ware of eastern Aegean manufacture described on pp. 408–10 above.

Constantinople

The later phases of Çandarli ware would appear to be well represented here, to judge by finds from the Great Palace excavations.[1] *Late Roman C* is the standard ware in early Christian times, being represented in all its stages; Constantinople was clearly one of the major markets for the ware. A little North African ware of the fourth and early fifth centuries has also been found. In the building fills under the Great Palace mosaics almost all the fine-ware fragments are *Late Roman C*, with only rare scraps of African R.S. Ware; this material is of late fifth- and early sixth-century types, with a probable terminal date of *c.* 520–540.[2] The same picture emerges from a group of similar date at Saraçhane.[3] In a large group of mixed late sixth- and seventh-century material from this site[4] about half of the red-slipped fragments are *Late Roman C*, rather over a quarter African R.S., and the rest a variety of wares, principally one or more fabrics of non-Mediterranean origin.[5] A certain amount of Cypriot R.S. is present, almost exclusively basin fragments of Form 11, together with appreciable quantities of the light-coloured Asia Minor product (see p. 408) and a number of stray pieces of other wares. Glazed wares of local origin occur alongside them. The latter appear to have taken over the market during the course of the seventh century and, by the eighth century, to judge by further finds from the Saraçhane excavations, had totally superseded the various Late Roman wares.

[1] The evidence for this and the following statements is drawn from the notebooks of the Great Palace excavations, kindly shown to me by Mr. R. B. K. Stevenson.

[2] See (Stevenson) *Great Palace* i pl. 19.26–34 and pl. 27 fig. 9 for some examples; these are typical of the group as a whole.

[3] *DOP* xix (1965) 235, fig. D.

[4] *DOP* xxii (1968) 203–16, figs. C–H, and 18–21.

[5] These proportions are confirmed by finds from elsewhere on the site; cf. my comment in *DOP* xx (1966) 229.

South Turkey and Syria

The Tarsus and Antioch finds provide most of the evidence, and indicate a similar situation in both areas. Late versions and derivatives of Eastern Sigillata A ware, together with some Cypriot products (mainly at Tarsus), maintained their hold here until the middle of the third century, when, as in Greece and elsewhere in the East, fine North African wares swamped the market. The occurrence of the latter at Dura-Europos (destroyed *c.* A.D. 256) gives a firm *terminus ante quem* for the date of its arrival *en masse*, which may be placed around A.D. 240–50. The negative evidence from the inland site of Ain Sinu (abandoned *c.* A.D. 237) may or may not be significant in this connection.[1] From then until the early fifth century (Waagé's 'early phase of Late Roman'[2]) African R.S. seems to have enjoyed a near-monopoly status, the only change being the gradual replacement of the finer varieties ('Late A') by the coarser ones ('Late B'), a situation mirrored by the Athenian Agora finds. The early versions of *Late Roman C* are not in evidence, but by the second half of the fifth century it, along with Cypriot R.S. Ware, had virtually taken over the market, apparently as the result of a sharp recession in the North African trade.[3] Both at Antioch and at Tarsus *Late Roman C* was the dominant ware from now on, with Cypriot R.S. Ware taking second place during the late fifth and early sixth century, giving way to a revival of African R.S. later in the sixth century.[4] African wares and *Late Roman C* continued to be imported at Antioch until some time in the seventh century, being superseded in a final phase (mid–late seventh century?) by *Egyptian C* (Waagé's 'Imitation Late B'[5]) ware. Cypriot R.S. Ware is notably absent at Antioch during the seventh century, but there is some slight evidence that it may have been in common use elsewhere in the region at this period, as was the case in the neighbouring areas.[6]

All three major wares on occasions penetrated deep into the hinterland. Examples of African R.S. and a sherd of *Late Roman C* (a stray of fifth-century date) were found at Dura-Europos, and Waagé indicates the presence of *Late Roman C* at Alişar Hüyük in central Anatolia, though this seems to be an isolated case. All three wares appear to be represented at Tell Fakhariyah in northern Mesopotamia, with pieces ranging in date from the end of the fourth century until about the middle of the sixth.

Cyprus

The presumed home of Cypriot Red Slip Ware (see remarks on p. 371), and of its predecessor, 'Cypriot Sigillata'.[7] In their respective periods (first–second century and fourth–seventh century) these wares predominate, though in early Christian times both African R.S. and *Late Roman C* are to be found in some quantities, with the normal fluctuations that occur in these wares. Finds from the Swedish excavations at Soli indicate that a fair amount of fine North African ware was being imported in the latter part of the third century, just as elsewhere in the East; at this stage the local

[1] For this site, see D. and J. Oates, *Iraq* xxi (1959) 207–42.
[2] *Antioch* iv.i 54–56.
[3] *Ibid.* 56.
[4] *Ibid.* 52, 56–7; *Tarsus* i 205.
[5] *Antioch* iv.i 58.
[6] Late examples of all the three main wares are present on sites in the Silifke region of southern Turkey (personal observation).
[7] For this see my article, 'Cypriot Sigillata', *RDAC*, 1967, 65–77, pl. XVI.

wares seem to have been in temporary eclipse. The presence of these imported wares shows that they were more highly regarded than their local counterparts. In seventh-century groups a few examples of *Egyptian R.S. A* and *C* wares are present alongside the local products.

Palestine

The import pattern of North African ware is here much the same as at Antioch. For a century or so after the Second Revolt very little fine pottery seems to have been imported; a single sherd of R.S. Ware from Samaria constitutes one of the few exceptions. The main change comes, as elsewhere in the East, with the arrival of the fine African wares of Form 50 and the like in the third century. The only examples of Çandarli ware in Palestine, two dishes from Samaria, date from about the same period. In the fourth century North African stamped wares of Style A are common, giving rise to a few imitations. From the mid fifth century onwards both Cypriot ware and *Late Roman C* arrive in large quantities, the latter, as at Antioch, being the commoner of the two. Sixth-century African R.S. Ware is well represented at Nessana and elsewhere, indicating something of a revival in the fortunes of the ware, just as in other regions. The finds from late sites such as Kh. al-Karak show that in the late sixth and early seventh centuries all three major wares were in common use. *Egyptian C* ware also appears in quantity on these sites, and it may be that this took over much of the market at an early stage in the seventh century. One or two pieces of *Egyptian A* ware, also probably belonging to this late phase, are recorded. By the early eighth century, to judge by the finds from Kh. al-Mafjar, these wares were no more.[1]

As in Syria, the imported wares penetrated far inland: pieces of third- and fifth-century date have been published from Petra. They do not, however, seem to have travelled as far as the Sassanian domains to the east.

Egypt

Here the overall picture is very different. Locally made wares continued to satisfy most of the demand for tableware throughout Late Roman times, though the African products were valued, being apparently something of a luxury. Only in and around Alexandria does the normal Mediterranean pattern of imports prevail; this region will therefore be considered first.

The most striking feature of the import pattern in this region, revealed clearly by the recent finds from Abu Mena, is a heavy preponderance of Cypriot R.S. Ware in the late fifth and early sixth centuries, when it accounts for something like 70% of the fine wares in evidence.[2] Cypriot R.S. of all periods is in fact common on this site, and one may consequently speculate that a fair proportion of the total output of the ware was destined for the Alexandria market, where it may have served as a convenient cheap substitute for the African wares. In addition, appreciable quantities of African R.S. (which also occurs in the centuries before) and of *Late Roman C* are also present at this stage, together with a few examples of *Egyptian A* and *B* wares. The

[1] See D. C. Baramki, 'The Pottery from Kh. el Mefjer', *QDAP* x. 2–3 (1942) 65–103.

[2] Figure based on the Kom group at Abu Mena.

proportions of all of these tend to rise during the sixth century, and by the end of the century, to judge by recent finds from Alexandria, *Late Roman C* and *Egyptian A* are the dominant fabrics. Thereafter, *Late Roman C* drops out of the picture, leaving *Egyptian A* and the new *Egyptian C* ware, and to a lesser extent the Cypriot wares, in control of the market for most of the seventh century. The exact date of the latest finds of these wares is not clear, but it may be close to the year 700, well after the Arab conquest of the country.

Over the rest of Egypt the situation is quite different. Local Egyptian products predominate, and *Late Roman C* and Cypriot R.S. Ware are more or less absent.[1] The relatively few African R.S. Ware pieces are generally, except at Karanis, of the finer varieties. The earliest of these date from the second half of the fourth century, comprising rectangular dishes of Form 56 and stamped vessels of Style A. The latter were rapidly copied, giving rise to the stamped *Egyptian A* and *B* wares. Unlike elsewhere in the East, there is here no visible decline in imports from North Africa in the fifth century; in fact many of the best examples of R.S. Ware of this period come from Egyptian sites. The fine-ware types Forms 82–84 make up a large proportion of the known pieces, though at Karanis their coarser counterparts were in common use. One should perhaps note that the only examples of African R.S. Ware so far published from Nubia, those from Ballana (see Form 82.3,8 and Form 89.4–6), are of precisely this period. African wares continued to penetrate up the Nile throughout the sixth century, stimulating further local copies. In Upper Egypt the local *Egyptian A* ware factories in the Thebes or Aswan region kept the market well supplied with good imitations of the luxury imported wares from the fifth century onwards, expanding their market to cover Nubia during the sixth century. *Egyptian B* ware met part of the same demand further north. *Egyptian C*, so common on the Mediterranean coast, is absent.

A stray piece of fourth–fifth-century African R.S. Ware is reported from Axum in Ethiopia. Late derivatives of the Egyptian stamped wares are also recorded from that country; these may represent the ultimate descendants of the Late Roman wares.[2]

Cyrenaica

Most of the available material dates from the century prior to the Arab invasion in the 640s. Sporadic pieces of African R.S. Ware from all the major sites attest regular importation of the ware from a fairly early date. Çandarli ware also reached Cyrenaica—one may suspect in fairly large quantities, in view of the close connections of the area with Greece, though this has yet to be proved. A little Tripolitanian R.S. Ware has been found in the west (notably at Tika, south of Benghazi, and at Tocra), and a few Athenian sherds at Tocra and Tolmeita (along with larger quantities of lamps). Later, *Late Roman C* was imported in quantity; in sixth- and seventh-century levels at Tocra[3] both it and African R.S. Ware are very common, the latter being the dominant ware in the seventh century, when the quantity of *Late*

[1] Apart from a possible piece from Hermopolis Magna (see Appendix 1).

[2] See the finds from Adulis published by Paribeni in *Mon. ant.* xviii (1907) 552–7; also Zahn, in *Deutsche Aksum-Expedition* ii (1913) 199 ff., and H. de Contenson, *Annales d'Ethiopie* iii (1959) 30.

[3] Detailed publication is forthcoming.

Roman C declines. Cypriot ware is not uncommon in this late period, particularly in the eastern areas. A little *Egyptian A* ware, mostly of late types, has been found on various sites; it is especially common at Ras el-Hilal, where its presence may indicate importation of the ware after the Arab conquest of the region.

Black Sea region

During the second and third centuries the Mediterranean imports into this area consist mainly of Çandarli ware, of which specimens occur on several of the major sites. North African pieces are few and far between, covering a period from the third century until the sixth. From the late fourth century onwards *Late Roman C* is imported in moderate quantities; most of Popescu's examples from Istros belong to this ware. The latest specimens of the ware (see Form 10.8–9) date from the period of the Avar invasions around 600.

Northern Provinces

Sporadic examples of African R.S. Ware occur in two regions. A limited number of pieces reached southern Austria and Switzerland during the period *c.* 250–400, as is shown by pieces from such sites as Virinum, Aguntum and Schaan. One dish (Form 56.14) reached Carnuntum on the Danube frontier some time at the end of the fourth century. A second group of finds are those published by Fremersdorf from Köln,[1] where some of the finer varieties enjoyed a brief vogue in the later part of the third century and the early decades of the fourth. Occasional fine pieces of the ware had reached the same area earlier in the third century,[2] though these are too few in number to indicate any regular importation. The late fourth-century sherds from Ezinge in Holland and the early sixth-century bowl from Godorf (Form 97.6) are best regarded as freaks.

Britain

Perhaps the most remarkable phenomenon in the history of exportation of the wares discussed here is the appearance of a fair number of pieces of *Late Roman C* and a lesser quantity of African products on sites of post-Roman date in Britain. Their distribution (see MAPS A 11, 15; B 29, 33) is unlike that of the earlier Romano-British and Gaulish wares, but is restricted to the Celtic areas in the West (mainly the south-west of England and the south of Wales), indicating that they arrived by sea direct from the Mediterranean. The slight scatter of examples of *Late Roman C* ware in Spain and Morocco lends credence to this possibility.

The material is all extremely fragmentary, with the exception of a *Late Roman C* dish from Dinas Powis in South Wales (Form 3.12), which is also among the earliest pieces present. The first examples to be recognized and published as Mediterranean wares were those from Tintagel in Cornwall (Radford (1956)); more recently fragments have been recorded from several other sites. The most northerly find is a single African sherd of Form 104B from the monastery site of Iona in the west of Scotland. The date-range of the various pieces seems to be *c.* 470–600. Most of the

[1] Fremersdorf (1958) *passim*; see Form 50.40–43, 45, 53–4, 57 and Form 59.2–3 above.

[2] Form 171.39 and frs. of a bowl of Form 45(?) from Trier; Form 172.23 from Gelsdorf.

Late Roman C pieces are of late fifth- to early sixth-century types, while the African R.S. sherds are in general of later (sixth-century) types. These wares are normally found associated with imported wine-amphorae of predominantly eastern Mediterranean types, indicating, so it seems, direct trade-links with the Byzantine world.[1]

SUMMARY

African Red Slip Ware supplanted Italian and Gaulish *terra sigillata* throughout the western Mediterranean in the years around A.D. 100, to remain the chief tableware there for the next five centuries or so. In the East, on the other hand, derivatives of the Eastern Sigillata wares and various local products retained the market; chief among these was Çandarli ware. The situation here remained relatively stable until around A.D. 240–250, when the fine versions of African R.S. Ware (Form 50, etc.) arrived in quantity throughout the East, rapidly ousting the other wares. From the mid third century until about the second quarter of the fifth the North African factories were the main suppliers of tablewares to the whole of the Mediterranean area. In the fourth century a number of local imitations arose, notably *T.S. grise* in the West and *Late Roman C* (a successor of Çandarli ware) in the East. By the end of the century African wares had penetrated far up the Nile valley, probably in the role of luxury wares, and were profoundly influencing the local products there, which had previously been little influenced by other Roman wares. Concurrently, some pieces also reached parts of Spain which had previously been served by the local *terra sigillata* wares, now in decline.

In the decades preceding A.D. 450 the exports of African wares to the East declined sharply, leaving these markets open to *Late Roman C* and Cypriot products, which, however, continued to be largely inspired from Africa. A similar though less marked decline may have occurred in the West also. The exact date of this change is not clear, but it coincides roughly with the arrival of the Vandals in North Africa, and a connection seems probable.[2] The near-continuous hostilities between the Vandals and the Roman world in the middle years of the fifth century can only have had a severe impact on trade between the two domains, though it seems clear that African wares were still in demand throughout the Roman Empire. Curiously, one region, Egypt, seems to have been relatively unaffected; here fine African products continued to arrive in some quantity. Elsewhere in the East, *Late Roman C* became the dominant ware, with the exception of Cyprus, the Alexandria region and possibly some parts of southern Asia Minor, where Cypriot products succeeded the African wares. *Late Roman C* was at this stage common as far west as southern Italy, and a certain amount was exported as far afield as Britain. The coming of more peaceful conditions at the end of the fifth century may have permitted the African wares to circulate more freely again, but the main recovery occurred under Justinian, presumably as a result of his reconquest of Africa. Towards the middle of the sixth century African products became very common again everywhere, though *Late Roman C* still retained the larger part of the market in the East. Cypriot R.S. Ware

[1] See Thomas (1959) for a general survey of these imports. A new survey by A. C. Thomas, D. P. S. Peacock and myself is to appear shortly.

[2] As already noted by Waagé, *Antioch* iv.i 56.

suffered a marked change in fortune for half a century or so, though it revived towards A.D. 600. During the early years of the seventh century African R.S. Ware and *Late Roman C* seem to have been largely superseded in Syria, Palestine and Egypt by *Egyptian* wares (*A* and *C*) and the revived Cypriot ware. This change-over, which appears to have occurred before the Arab conquest of these regions, may well reflect the disruptions caused by the Persian invasions of the 610s and 620s. In the West, the collapse of Justinian's empire seems to have had much the same effect. However, in the Aegean region and in Cyrenaica both wares continued to arrive in unabated quantities until the middle years of the century, when they finally disappear from view. Cypriot R. S. Ware, which during the first half of the seventh century seems to have enjoyed a greater vogue than ever before, being regularly exported as far west as the eastern Aegean and Cyrenaica, continued to be produced until around 700, the date of the latest known groups from Cyprus and Egypt. *Egyptian A* and *C* wares must have remained in circulation in Egypt and Palestine until about the same date. Thereafter, Byzantine and Islamic glazed wares succeeded to the market, and the remnants of the Late Roman pottery tradition lingered on only in Nubia and Ethiopia.

XII

CONCLUSION

A FEW general observations may now be made on the wares presented in the preceding chapters. First, it should be noted that all the evidence we have for them comes from archaeological sources. No surviving literary text refers to them; after the time of Juvenal and Martial our sources are silent regarding pottery and potters alike.[1] Equally, we have no contemporary evidence, literary or pictorial, to show us what the various wares were used for. It may be assumed that they were used primarily as tablewares, for most of the vessels listed above are dishes and bowls, and specialized forms are rare; some, however, would appear to have been used more in the kitchen.[2] The presence of crosses and the like on many of the later examples has been taken by some writers to indicate that they were made specially for liturgical use; this is highly improbable, since examples occur in various contexts. No doubt some such vessels were put to use in churches for a variety of purposes (e.g. the platter R.S. Ware Form 89.7), but there is no reason to believe that any were made exclusively for liturgical use. It is to be noted that vessel-forms suitable for use as drinking-cups are virtually absent, except in the earliest phases of R.S. Ware, whereas they are quite common in Arretine and the other early Roman fine wares. Jugs and other closed forms are also relatively uncommon. It may be assumed that glassware had taken their place for everyday use. Finds from houses in Pompeii indicate that as much glassware as pottery was being used for domestic purposes by Flavian times.[3]

To judge by the large quantities which have been found, all of the wares described were cheap enough to be used by virtually all levels of society. Their wide circulation proves that they were able to compete successfully with locally produced wares. Only in places such as Egypt and Britain, where the cost of transport was relatively high on account of their distance from the main production centres, can it be said that the African wares and the like constituted something of a luxury product. The decoration found on these vessels and, in some cases, their shapes indicate that they served as cheap substitutes for the silverware and bronzeware vessels which graced the tables of the rich.

The distribution of the various wares gives us some insight into the economic history of the times. The extremely wide—in some cases almost Empire-wide—

[1] Apart from a passing reference in an Imperial rescript of 337 (*Codex Iustiniani* X. lxvi (lxiv). 1: 'de excusationibus artificum'), and some figurative references of Biblical origin in early Christian writers.

[2] E.g. R.S. Ware Forms 181–5, 191–9, and Cypriot R.S. Form 11.

[3] A count of the finds from Regio I, Insula X, 7 (*NSc*, 1934, 292–308) reveals a total of 46 glass vessels and only 42 of pottery (excluding lamps). The furnishings of this house seem to have been recovered intact, and may therefore provide a reliable guide to what was in current use at the time.

circulation of certain wares has been noted above. The virtual monopoly which the African wares had at Rome over a period of several centuries is also worth noting; apparently no Italian product was able to compete with them. At the same time, the demands of the metropolitan market and its changing tastes may have had an influence on the African producers, causing them to model their products on the silver and gold plate current in the capital. At a later stage Constantinople seems to have supplied the models which were followed.

The North African products demonstrate the continuity of a single tradition of pottery-making over a period of some six centuries (possibly eight, if one counts their coarse predecessors). This was apparently not seriously curtailed by either the Vandal conquest of the area in the fifth century or the Byzantine reconquest in the sixth, both of which involved considerable upheavals, but continued right up to the coming of the Arabs in the late seventh century. The position of the African factories and of their export trade during the Vandal period is of some interest. As Waagé has pointed out (*Antioch* iv.i 56), the sharp decline in the exports of R.S. Ware to the East around the middle of the fifth century and the corresponding rise in the frequency of *Late Roman C* and Cypriot R.S. Ware may be taken to be a direct consequence of the Vandal invasion of North Africa. However, the exportation of R.S. Ware cannot have come to a complete halt (except temporarily in times of active warfare), for, to judge by the finds from Athens and elsewhere, small quantities of the ware were still reaching Roman markets even in the period before 474 when the Vandals were still in an expansionist mood. Moreover, the African wares were still exerting an influence on the other wares, as is shown in the stamped motifs and vessel-forms of the period, especially in Egypt. Though difficult to obtain, they were clearly still regarded as the tablewares *par excellence*. One may note that R.S. Ware seems to have recovered much of its former market during the sixth century, no doubt as a result of Justinian's reconquest of Africa. Paradoxically, its influence on the other fine wares seems to have declined as it became more readily available.

The distribution pattern of the Gaulish *t.s. grise* also seems to reflect the political conditions in the area. This ware had a predominantly Mediterranean distribution in its earlier phases, but later circulated mainly overland; the change may fairly be linked with the conquest by the Visigoths of the areas in which it was produced.

The appearance of Mediterranean wares in Köln in the late third and early fourth centuries and in Britain in the late fifth and sixth centuries is also of some historical interest. The former remains unexplained, since good *terra sigillata* was still being produced locally at the time. The latter is of considerable importance to Celtic history, since, quite apart from the dating-evidence it provides for a poorly documented period, it indicates direct trade-links with the Eastern Empire. Since the earliest of the imports into Britain date from the late fifth century and are predominantly of Eastern manufacture (*Late Roman C* and Eastern wine-amphorae), we may conclude that, barring periods of active hostility, the Visigoths and Vandals were ready to tolerate Byzantine mercantile activity through the Straits of Gibraltar. This traffic was no doubt made easier by Justinian's recovery of Ceuta (*c.* 544), and the subsequent conquest of southern Spain, which gave the Byzantines full control of the Straits from *c.* 554 onwards. Their final loss of the region in 629 seems to mark the end of regular contacts with Britain.

The exact historical circumstances of the disappearance of the various Late Roman wares during the seventh century are not clear; the process may, as we have seen, have begun with the Persian wars of the early seventh century and seems to have been hastened both in the East and in North Africa by the Arab conquest of these regions. Lack of archaeological evidence for this and the succeeding period makes it difficult to determine what wares, if any, took their place in each region: the later seventh and eighth centuries may fairly be called the Mediterranean region's 'Dark Ages'.

APPENDIX 1

LATE ROMAN POTTERY SITE BIBLIOGRAPHY

Note: Sites are listed alphabetically by region, commencing with those in Tunisia and Tripolitania, and then proceeding in a clockwise direction around the Mediterranean; after these, sites in the northern provinces appear, listed from east to west. For locations, see MAPS 37–40.
RS=African Red Slip Ware.
LRC=Late Roman C Ware.
Some references to second and subsequent publication are omitted.

TUNISIA

Note: All the pieces cited are African RS Ware or local variants of the same.

General:
Holwerda (1936) 42 ff., nos. 547–715 (excluding 678), 925–940, figs. 12–16, 23, pls. IV-VI, VIII, X.
CVA Copenhague 7 pls. 300–312.

Bled-Maknassy
C. Gouvet, *BAC,* 1905, 112–13.

Bordj Jemajeur
J. Renault, *Cahiers d'archéologie tunisienne* iii (Tunis, 1910) 53 (fig. in text).

Bulla Regia
BAC, 1890, 200, fig. 25.
Cat. Alaoui (1897) 236–7, pl. XLII, nos. 208, 216–17.

Carthage
Delattre, *Rev. arch.*[3] xii (1888) 158 (fig. in text).
Delattre (1888) 219–21; *id.* (1893) 39–40 (figs. in text).
Delattre, *Cat. Musée Lavigerie* iii (1899) 49–53, pl. XI.
J. Renault, *Cahiers d'archéologie tunisienne* iii (1910) 108–9; *id.* iv (1911) 95–98 (figs. in text).
Bull. soc. ant. France, 1916, 276 (fig. in text).
H. de Villefosse, *Musée africain du Louvre* (Paris, 1906/1921) 7, no. 69, pl. XIX,5.
CVA Collections de Cracovie (Pologne 2), Coll. de l'Université, pl. 16.23–25.
BAC, 1943–45, 81; *id.* 1953, 44, fig. 1 (on p. 45).
Waagé (1948) 48–49, pls. VIII-IX, shapes 826, 834, 861, 868.
Salomonson (1962) 71, 90, pls. XXII,5, XXXII,6.

El-Aouja
BAC, 1914, cxlix-cli, cxcix-cci; *id.,* 1915, clxxvii-clxxx; *id.,* 1916, cxxv-cxxix, pls. XXVIII-XXIX.
Cat. Alaoui (1922) 300 ff., no. 1069 ff., *passim,* pl. XIX,5.
Salomonson (1960) 50–52, 54, figs. 19a-b, 21a-b, 23, 24, 27a-b.

El-Djem (Thysdrus)
BAC, 1910, ccx-ccxi, ccxli; *id.,* 1912, ccxvi; *id.,* 1914, clii-cliii, cci; *id.,* 1916, cxxvi-ccxxvii, pl. XXX.
Merlin (1913).
Cat. Alaoui (1922) 300 ff., nos. 1057–68, 1131, 1140 ff. *passim.*
Salomonson (1960) 51, fig. 22a–b.
Salomonson (1962) 74 ff., pl. XXIV, 1; *id.* (1964) 107–10, fig. 1 and *passim.*

Hadjeb el-Aioun
BAC, 1898, clix.
Godin, *BAC,* 1905, 276–7.
Cat. Alaoui (1910) 310, 316, nos. 656, 724–5.

Tunisia *cont.*

Henchir es-Srira
BAC, 1905, clxvi-clxviii.
L. Hautecœur, *MEFR* xxix (1909) 383 ff., 391.
Cat. Alaoui (1910) 311–12, nos. 665–8.
Stern (1968) *passim.*

Kairouan region, Central Tunisia
BAC, 1913, ccxvii-ccxviii; *id.*, 1923, xli-xlii.
K. A. Neugebauer, *Führer durch das Antiquarium* ii, *Vasen* (Berlin, 1932) 209–10.

Ksour es-Saf
Kern (1958) *passim.*

La Skhira
M. Fendri, *Basiliques chrétiennes de la Skhira* (Paris, 1961) pls. 38(?), 39.1–2.

Oudna (Uthina)
P. Gauckler, *Mon. Piot* iii (1896) 215, n. 1.
P. Gauckler, *BAC*, 1897, 454–7, pls. VIII-IX.

Raqqada (Henchir el-Ouiba)
Salomonson (1968) 97–125 and *passim*, pls. II-IV, tabl. II.

Sbeitla area
P. Addyman, in *Brathay Exploration Group: Annual Report for 1962* (limited circulation) 74–75, fig. 11.1.

Sfax
R. Massigli, *Musée de Sfax* (Paris, 1912) 57, no. 16.

Sidi-Aïch
R. Cagnat, "L'atelier de poterie de Sidi-Aïch", *BAC*, 1888, 473–4.
Stern (1968) *passim.*

Sousse (Hadrumetum)
Vercoutre, *Rev. arch.*[3] iii (1884) 22–23.
BAC, 1898, clix; *id.*, 1902, ccix-ccx; *id.*, 1915, clxxviii.
Cat. Alaoui (1897) 236, pl. XLII, nos. 206–7, 209–11 (republished in Déchelette (1904) ii 175–6); *id.* (1910) 316, nos. 722–3; *id.* (1922) 319, no. 1212.
Goetschy, *BAC*, 1902, 414, no. 17.
Carton, *Mém. soc. ant. France* lxi (1902) 237–8.
E. Pottier, *CRAI*, 1913, 442–3, figs. 1–3.
L. Foucher, *Thermes romains des environs d'Hadrumète* (Tunis, 1958) 24–5, pl. XIV, a.
L. Foucher, *Hadrumetum* (Tunis, 1964) pl. XXXII, c.
L. Foucher, *La Maison des Masques à Sousse: Fouilles 1962–1963* (Tunis, 1965) 37–42, figs. 54–56.

Thapsus
C. T. Falbe, *Recherches sur l'emplacement de Carthage* (Paris, 1833) 128–9, pl. V, 1.
BAC, 1920, cxviii-cxix.

Thelepte (Feriana)
Besnier & Blanchet, *Collection Farges* (1900) 14, no. 15, pl. V, 9.
Rolland (1951) 185, fig. 178.
Lamboglia (1963) 193 (fig. in text).

TRIPOLITANIA AND FEZZAN

For general works, see preceding section. All examples are African RS or Tripolitanian RS Ware.

Bu Ngem
Rebuffat, Deneauve & Hallier, 'Bu Njem 1967', *Libya Antiqua* iii-iv (1966–67) 94–137 *passim*, esp. 117 ff. (Deneauve).

Germa (Garama) region
G. Caputo, *Mon. ant.* xli (1951) cols. 310, 330, 341, 379, 388, figs. 100, 119–20, 129, 166.
M. Ayoub, *Libya Antiqua* iii-iv (1966–67) 213–9 (Arabic section, pp. 93–98) *passim.*

Tajura
Libya Antiqua iii–iv (1966–67), Arabic section, 26–35 *passim*, fig. 2 on p. 33.

Wadi Bei el-Kebir
O. Brogan, *id.* ii (1965) 61.

Wadi el-Amud
O. Brogan, *id.* i (1964) 48, 52–55, pl. XXXII, 13–17.

Tripolitania *cont.*

Wadi Neina

O. Brogan, *id.* ii (1965) 59.

Wadi Sofeggin region

O. Brogan & D. Smith, *id.* iii-iv (1966–67) 139–44 *passim.*

ALGERIA

Note: All examples are RS Ware or local variants of the same.

Cherchel

A. Ravoisie, *Exploration scientifique de l'Algérie pendant les années 1840–1842: Beaux-arts, architecture et sculpture* iii (Paris, 1846) pl. 44, F VII-IX.

(F. de Cardillac) *Bull. soc. de géographie et d'archéologie d'Oran* x (1890) 263–4, fig. 8.

BAC, 1902, 353, nos. 18–20.

Dellys

P. Gavault, *BAC,* 1895, 140, no. 12, pl. VII, fig. 7.

Djemila

E. Babelon, 'Note sur un fragment de poterie à figures', *BAC,* 1920, 231–4.

Allais (1957).

Allais (1959).

Salomonson (1962) 85–86, pl. XXXI, 1.

Draria el-Achour

Camps (1955) *passim.*

Hippo Regius

E. Marec, *Libyca* vii (1959) 150–1, figs. 2–4.

Allais (1960) *passim.*

J.-P. Morel, *Bull. d'arch. algérienne* i (1962–5) 129–34, figs. 92–99, 102.

Mila

J. Lassus, *Libyca* iv (1956) 223–8 *passim,* pls. I-II.

Mouzaiaville

CIL viii.2, 9285 (after *Revue africaine* vi (1862) 463–4).

Oued Bibi (prov. Constantine)

H. Vertet, 'Cerámica romana imperial hallada en Oued Bibi (Constantina, Argelia)', *Arch. Esp. Arq.* xxxiv (1961) 204–6.

Sétif

Février (1963) *passim;* Février (1965) *passim.*

P.-A. Février & A. Gaspary, *Bull. d'arch. algérienne* ii (1966–67) 24–37 *passim,* fig. 20 ff.

Sidi Ferruch (near Algiers)

G. Faider-Feytmans *et al., Les antiquités . . . du Musée de Mariemont* (Bruxelles, 1952) 158, pl. 57, R 87–88.

Telergma/Timetlas region (prov. Constantine)

Berthier/Martin (1948).

Tiddis

BAC, 1954, 182; *Libyca* vi (1958) 260–3, with figs. in text; Allais (1959) 47 ff.

Allais (1960) 126, 129, figs. 2, 5.

Salomonson (1968) 118, pl. IV, 5.

Timgad

G. Doublet & P. Gauckler, *Musée de Constantine* (Paris, 1893) 111, pl. XII, 7.

Allais (1959) 46–47.

Tipasa

S. Gsell, *MEFR* xiv (1894) 448, fig. 61.

J. Baradez, *Libyca* v (1957) 182, 192, pls. V, VII.

Baradez (1961) 13 ff., pls. I–X *passim,* and pp. 116–130, pls. I–IV.

S. Lancel, *Bull. d'arch. algérienne* i (1962–5) 61, 66, pl. III.

Baradez (1967).

MOROCCO

Note: RS Ware unless stated otherwise.

General:
Jodin & Ponsich (1960).
M. Ponsich & M. Tarradell, *Garum et industries antiques de salaison dans la Méditerranée occidentale* (Paris, 1965) *passim.*

Ad Mercuri
Jodin & Ponsich (1960) fig. 10e, pl. III, top two rows.

Banasa
G. Simpson, in *Report of the Durham University Exploration Society's Expedition to French Morocco, 1952* (Durham, 1956; limited circulation) 159, nos. 14, 21 with figs. in text.

Ceuta
Notic. Arq. Hisp. vi (1962) 197, 375, pls. 59.2, 100.6.
Posac Mon (1964) (pp. 327–8, fig. 3.2–3 = TS grise).
Madrider Mitt. ix (1968) 363, pl. 145a.

El-Benian
Jodin & Ponsich (1960) pl. III, third row.

El-Kasr Srir
Ibid. pl. III (third row, 2).

Lixus
Ibid. 289, 313, figs. 14 a,c, 16, pls. I, II (top two rows), III (bottom row). Includes LRC, TS grise.

Mogador
Ibid. 289, figs. 8 a–c, 9d, pl. II, third and fourth rows.
A. Jodin, *Les établissements du roi Juba II aux îles purpuraires* (*Mogador*) (Tanger, 1967) 146–60, pls. 66, 68–70.

Sala
Jodin & Ponsich (1960) 313, fig. 14 b. TS grise, etc.

Suiar
Ibid. fig. 8e, pl. III, fourth row.

Tamuda (*Tetuán*)
P. Quintero Atauri, *Excavaciones en Tamuda: Memoria resumen de las practicadas en 1941* (Protectorado de España en Marruecos, Junta Superior de Monumentos históricos y artísticos, Núm. 5; Larache, 1942) 6–8, pls. II–III, IV(?).
Mem. mus. arq. prov. v (1944) 223, pl. 77.1.
Arch. Esp. Arq., 1949, 92–93.
Jodin & Ponsich (1960) 310, fig. 12a, h, pl. II, bottom row.

Tangier area
M. Ponsich, *Bull. d'arch. marocaine* v (1964) 240 ff., 262 ff. *passim*, pl. II, 18–20.

Thamusida
Simpson, *op. cit.* 159, nos. 2–3, with figs. in text.
J.-P. Callu *et al.*, *Thamusida* i (Paris, 1965) 114 ff., 218 ff., 273, pl. 138.6.

Volubilis
M. Euzennat, *Bull. d'arch. marocaine* ii (1957) 57, 59, 63.
Jodin & Ponsich (1960) fig. 11 c, pl. III, third row, left.

SPAIN AND PORTUGAL

General:
Zeiss (1933). Palol Salellas (1949). Russell Cortez (1951). Lamboglia (1958), (1963).

Algarve prov. (Portugal)
Zeiss (1933) 470.

Ampurias (*Emporion*)
M. Cazurro, *Institut d'Estudis Catalans, Anuari* iii (1909–10) 349–51, fig. 30; A. Ballesteros y Beretta, *Historia de España* i (1919) fig. 357 on p. 563; Zeiss (1933) 470; Palol Salellas (1949) pl. XXXVI, figs. 5–6. TS grise.
Lamboglia (1958) *passim; id.* (1963) 149–51 (with fig. in text), 157, 161–2. RS.
Almagro & Lamboglia (1959) 5, 12, figs. 3, 12, 13. RS.
M. Almagro, *Excavaciones en la Palaiápolis de Ampurias* (Excavaciones Arqueológicas en España, 27) 46–57, figs. 13–19 *passim.* RS, TS grise; fig. 16.9 could be LRC.

Spain and Portugal *cont.*

Archena (prov. Murcia)
Zeiss (1933) 470. RS(?).
Asta Regia
M. E. Guerrero, *Excavaciones de Asta Regia* (*Mesas de Asta, Jerez*); *Campaña de 1942–43* (Acta Arqueológica Hispánica iii; Madrid, 1945) pl. XXI, fig. 2. RS(?).
Baelo
P. Paris *et al.*, *Fouilles de Belo* (*Bolonia, Province de Cadix*), *1917–1921* ii, *La nécropole* (Bibliothèque de l'école des hautes études hispaniques, fasc. vi; Bordeaux & Paris, 1926) 126–8, 165–6, fig. 95, pl. XXX, left, etc.; Zeiss (1933) 468, 470, fig. 1.4. RS.
Bairral (Portugal)
Russell Cortez (1951) 43, figs. 31–32, 34.3. RS Ware, possibly LRC and local.
Balsa (Algarve, Portugal)
Arch. Esp. Arq., 1951, 276–7, pl. I. RS(?).
Barcelona
A. Durán y Sanpere, *Ampurias* v (1943) 75, pl. XVIII, fig. 40. RS.
Pallarés (1959 : 2) 234. RS.
Lamboglia (1963) 158, 202, with figs. in text. RS.
Adroer (1963) 105–110, 118–21. RS (incl. plain versions).
Ampurias xxix (1967) 210, fig. 8. RS, and possibly LRC (fig. 8.14).
Belgida region
Arch. Preh. Lev. ii (1945) 260 ff., pl. VI, B–C. RS.
Bracara Augusta (*Braga,* Portugal)
A. Moutinho de Alarcão, *RCRF Acta* viii (1966) 45. RS; one fr. LRC.
Budens (Algarve, Portugal)
A. Viana *et al.*, *Arch. Esp. Arq.* xxvi (1953) 122–3, pl. II. 25, 32. RS.
Cartagena
E. Cuadrado Díaz, *Not. Arq. Hisp.* i (1952) 152, 154, figs. 59, 61. RS.
Carteia
C. Peman, in (ed. J. Martínez Santa-Olalla) *Corona de Estudios . . . a sus Martires,* i (Madrid, 1941) 261–2, pl. 31.5; reprinted in *Informes y Memorias,* no. 1 (Madrid, 1954) 36, no. 7, pl. II.5. RS.
Castellnovo (prov. Castellón)
D. Fletcher Valls, *Arch. Preh. Lev.* v (1954) 195, 197, 210–3, pl. V,1–2, 4; Lamboglia (1963) 198, with fig. in text. RS, TS grise.
Castro de Fiães (Vila da Feira, Portugal)
F. Russell Cortez, *O Instituto* cxiv (Coimbra, 1950) 74, 81–88, figs. 11, 15; reproduced in Russell Cortez (1951) 19, fig. 4. RS, TS grise?
Castro do Fontes (Portugal)
Russell Cortez (1951) figs. 10, 12. TS grise? (red).
Centcelles
H. G. Niemeyer & C. Rüger, *Madrider Mitt.* iii (1962) 109–113, 118, figs. 3–5, pl. 22. 33–34. RS; some TS grise (nos. 32, 33?, 34).
Conimbriga (*Condeixa-a-Velha,* Portugal)
Zeiss (1933) 467, 470, fig. 1.1. RS.
Delgado (1967) *passim.* RS.
Elche (*La Alcudia,* Alicante)
Zeiss (1933) 470 (with ref.). RS?
Not. Arq. Hisp. ii (1953) pl. 100. RS.
A. Ramos Folqués, *Arch. Esp. Arq.* xxvi (1953) 341, fig. 13a. TS grise.
A. Ramos Folqués, *Arch. Esp. Arq.* xxxvi (1963) 241–3, figs. 41, 43–45, 47(?). RS.
El Germo (Córdoba region)
T. Ulbert, *Madrider Mitt.* ix (1968) 362–3, fig. 10, pl. 140 b. RS.
Emerita (*Merida*)
Zeiss (1933) 467–8, 471, fig. 1.2, 6. RS, TS grise.
Fonte do Milho (Portugal)
Russell Cortez (1951) 33, fig. 21. RS.
Formentera
H. G. Niemeyer, *Madrider Mitt.* vi (1965) 98–101, figs. 2.9(?), 4.1–15. RS (fig. 4.9 possibly LRC?).
Herrerias
Zeiss (1933) 471.

Spain and Portugal *cont.*

Hornillos del Camino (prov. Burgos)
Mem. mus. arq. prov. vi (1945) 28, pl. V,11–12; Russell Cortez (1951) 59. Imitations(?) of RS.
Ibiza (general)
Lamboglia (1958) 278, 292, 294, with figs. in text. RS.
Llafranc (Gerona)
Pyrenae ii (1966) 110, fig. 9.3–4. RS.
Lucentum (*Alicante*)
Zeiss (1933) 470. RS?
Málaga
Zeiss (1933) 471. RS?
Pamplona
Zeiss (1933) 471. TS grise?
Pollentia (Mallorca)
M. Almagro & L. R. Amorós, *Ampurias* xv–xvi (1953–4) 255, 259–60, figs. 11, 18.2–3, 20. RS (or copies).
Mercedes Vegas, *BJ* 165 (1965), 109–110, 115–6, 121, figs. 3.1–4, 4.9 (RS) and 4.12 (LRC?).
Quinta do Marim (Algarve, Portugal)
Zeiss (1933) 467–8, fig. 1.3; Russell Cortez (1951) fig. 1 (on p. 10). RS.
Saguntum
Fuhrmann (1940) 99, pl. 12; Salomonson (1962) 52, pl. XI,2. RS.
Sant Antoni (*Portus Magnus*, Ibiza)
J. Román y Calvet, *Los Nombres e Importancia Arqueológica de las Islas Pythiusas* (Barcelona, 1906) 250, pls. 72.1–2, 76. RS.
Zeiss (1933) 471.
J. Colomines, *Ampurias* iv (1942) 143, 152–3, pls. II 9, III–V. RS.
San Cugat del Vallés (Barcelona)
Palol Salellas (1949) pl. XXXVI, fig. 7.
San Felíu de Guixols (Gerona)
Esteva Cruañas (1962) 57–66, figs. 4–10. RS.
Tarragona
J. Serra Vilaró, *Excavaciones en la necrópolis romano-cristiana de Tarragona* (Junta Superior de Excavaciones y Antigüedades, no. 93; Madrid, 1928) 82, pls. XXXVIII,27, XXXIX. RS, TS grise.
Zeiss (1933) 471.
Lamboglia (1958) 266, 272, 275, 284, 288, with figs. in text; *id.* (1963) 149, 195–6, 198–9, 204, with figs. in text.
C. B. Rüger, *Madrider Mitt.* ix (1968) 253, figs. 10–12. RS, TS grise; fig. 11.3 may be LRC.
Torre del Mar (Málaga)
H. G. Niemeyer, *Madrider Mitt.* iii (1962) 40, 43, fig. 1. RS ware, incl. plain version ('Schwarzrandware').
Torrox (prov. Málaga)
R. Amador de los Rios, *Revista de Archivos, Bibliotecas y Museos*, 3 ser., xxxi (July–Dec. 1914) 241, pl. XIV; Zeiss (1933) 468, 471, fig. 1.5; S. G. Reyna, *Informes y memorias*, no. 12 (1946) 90, pl. XLII top right; Palol Salellas (1949) 452. RS, TS grise.
Tróia and *Chibanes* (*Caetobriga*?, Portugal)
F. Bandeira Ferreira, *Conimbriga* i (1959) 60, 67, fig. 8. RS.
Valencia
Lamboglia (1958) 269, 287–9, 292, with figs. in text; *id.* (1963) 199 with fig. RS.
Pallarés (1959: 1). RS.
Arch. Preh. Lev. xi (1966) 223, 228, pls. II,9, IV,5. RS.
Vila Fernando (Elvas, Portugal)
Crónica del III Congreso Nacional de Arqueología (*Galicia, 1953*) 569, pl. I,1 (following p. 578). RS.
Villanueva y Geltru (prov. Barcelona) (=*Aderró*)
Arch. Esp. Arq. xxviii(1955) 178, fig. 5. RS, TS (grise?).

SOUTHERN FRANCE

General:
Déchelette (1904) ii 327–334, pls. XII–XIII. TS grise, etc.
Rigoir (1960), (1968). TS grise.
Fouet (1961). TS grise.
Lamboglia (1958), (1963). RS.

Note: publications listing TS grise only are omitted from the list below; for these, see Rigoir and Fouet *supra.*

Aix-en-Provence
Lamboglia (1958) 284 (fig. in text), 287. RS.
Gallia xviii.2 (1960) 300, fig. 20. RS (also TS grise).

Arles
Lamboglia (1958) 275, 280, 282, 289, with figs. in text; *id.* (1963) 187–205 *passim,* with figs. in text. RS.

Cabasse (Var)
Lamboglia (1958) 292 (fig. in text). RS.
G. Bérard, *Gallia* xix.1 (1961) 147, pl. XXIX. RS.

Carrelet (Camargue)
M. Chaillan, *BAC,* 1930–31, 460, pl. XXII. RS, TS grise.
F. Benoît, *Les cimetières suburbains d'Arles . . .* (Rome & Paris, 1935) fig. 11.2,5,6. RS.

Carro (Baie de Marseille)
Gallia xx (1962) 152, figs. 8–9. RS.

Cavaillon (Vaucluse)
A. Dumoulin, *Gallia* xxiii.1 (1965) 40, fig. 46, f. RS.

Cimiez (*Cemenelum*)
Gallia xxii.2 (1964) 607, fig. 53. RS.
Mouchot (1963) *passim.* RS & TS grise (red); classification erratic.

Glanum
Lamboglia (1963) 151. RS.

Les Blaïs (Var)
Lamboglia (1958) 270 (fig. in text); *Cahiers ligures de préhistoire et d'arch.* viii (1959) 95, no. 24, fig. 6.7. RS.

Mailhac (*Les Oules*)
Lamboglia (1958) 284. RS.

Marseille
Clerc & d'Agnel (1904) 82–85, pl. VIII. RS (also TS grise, pp. 17–42).
Bull. soc. ant. France, 1945–47, 245–51, pl. II. RS, etc.
Lamboglia (1958) 293 (fig. in text); *id.* (1963) 194, 205 with figs. in text. RS.

Menton
Lamboglia (1958) 263, with fig. in text. RS.

Montmaurin (Haute-Garonne)
Fouet (1961). TS grise.
G. Fouet, 'Une importation tunisienne du IVe siècle dans la Villa de Montmaurin (Haute-Garonne)', in (ed. R. Chevallier) *Mélanges d'archéologie et d'histoire offerts à André Piganiol* (Paris, 1966) 1019–26.

Narbonne
Lamboglia (1963) 202 with fig. in text. RS.

Nice
Lamboglia (1958) 268, with fig. in text. RS.

Orange(?)
H. Vertet, *Actes du 86e Congrès National des Sociétés Savantes, Montpellier 1961* (Paris, 1962) 49–50, fig. 11. RS.

Orléans
V. Romagnesi, *Mém. soc. royale antiq. France* xviii (1846) 256, pl. II,9. Probably RS.

Port-Vendres (*Portus Veneris*)
Gallia xxiv.2 (1966) 451–2, figs. 2–4. RS figured, also TS grise.

Saint-Blaise
Rolland (1951) 179–199, figs. 54–68, 174, 177–83; *id.* (1956) 57, 73–4, figs. 49–53; *id., DACL* xiv 2857–8, figs. 11197–11200 (in article 'Ugium'). Mostly TS grise; some RS (see (1951) figs. 177, 179–81, etc.).
Lamboglia (1958) 289 (fig. in text); *id.* (1963) 189–90 (figs. in text), 197, 202. RS.

Southern France *cont.*

St. Tropez
Cahiers ligures de préhist. et d'arch. viii (1959) 186, no. 2 (fig. in text). RS.

Salon
F. Benoît, *Les cimetières suburbains d'Arles dans l'antiquité chrétienne et au moyen âge* (Rome & Paris, 1935) fig. 12.2. RS.

Valence
Lamboglia (1958) 289 (fig. in text). RS.

Vendres
Mouret (1927) pls. 50–54. Mostly TS grise; the following appear to be RS: pl. 50.24–27, pl. 51.26, pl. 53.23, 34.

CORSICA AND SARDINIA

Barumini
NSc, 1946, 199, nos. 6–7, fig. 8.4–5. RS.

Cagliari
P. Mingazzini, *NSc,* 1949, 258–263, figs. 32–36. RS and some TS grise (see figs. 34, b, 35, a).

Gonnesa
(G. B. De Rossi) *Bull. arch. crist.,* 1873, 125, pl. X,2; R. Garrucci, *Storia della arte cristiana* vi (Prato, 1880) pl. 466.3. RS.

Lucciana (*Mariana*), Corsica
Gallia xxii.2 (1964) 609, fig. 58. RS.

S. Gavino Monreale
G. Lilliu, *NSc,* 1949, 281, fig. 1.3–4. RS.

Tharros
F. G. Lo Porto, *Studi Sardi* xiv–xv (1955–7), i 304, nos. 5–6, pl. 1.15 & 19. RS.
G. Pesce, *Mon. ant.* xlv (1961) cols. 424–5, nos. 5–8, ?9, fig. 59. RS.

ITALY

Note: all examples are RS, unless stated otherwise.

General:
Lamboglia (1941), (1958), (1963).
De Waal (1904).

Albenga
N. Lamboglia, *Riv. st. lig.* xiii (1947) 171, nos. 25–27, and p. 177.
Lamboglia (1958) 290, with fig. in text; *id.* (1963) 148.

Aquileia
G. Brusin, *Gli scavi di Aquileia* (Udine, 1934) 125, 128, with figs. in text.

Aricia
De Waal (1904) 310–11, pl. II,1.

Ascoli Piceno
R. Mengarelli, *Mon. ant.* xii (1902) 267, fig. 143.

Bordighera
N. Lamboglia, *Riv. st. lig.* xxiv (1958) 128–9, fig. 10, no. 1.

Calvatone (Lombardia)
Lamboglia (1963) 153, with fig. in text.

Capena and Ager Capenas
G. D. B. Jones, *PBSR* xxx (1962) 128 ff. *passim*; *id., PBSR* xxxi (1963) 103–119 *passim,* 133, fig. 12. Refs. under 'Red Polished Ware'.

Capolago
E. Ettlinger, *Ur-Schweiz* xxvii, 2–3 (1963) 31, fig. 15. Red version of TS grise?

Castrovillari (Calabria)
F. T. Bertocchi, *Klearchos* v (1963) 148, fig. 6 b.

Cività Lavinia (*Lanuvium*)
C. L. Visconti, *Bull. comm. arch. munic.* i (1872) 117–22, pl. III; M. J. Vermaseren, *Corpus Inscriptionum et Monumentorum Religionis Mithriacae* i (The Hague, 1956) 112, no. 207.
E. L. Caronna, *NSc,* 1966, 103–11, figs. 17, 19, 22–24 *passim.*

Eretum and region
R. M. Ogilvie, *PBSR* xxxiii (1965) 81, 92–104 *passim,* 110–112, figs. 6, 8. Refs. under 'Red Polished Ware'.

Italy *cont.*

Falerii and Ager Faliscus
M. W. Frederiksen and J. B. Ward Perkins, *PBSR* xxv (1957) 72–111 *passim*, 166, 172, 180. Refs. under 'Red Polished Ware'.

Francolise (Campania)
PBSR xxxiii (1965) 65.

Genova
Lamboglia (1963) 203.

Libarna
Forma Italiae: Libarna fig. 42 (second piece on second row).
Lamboglia (1958) 268.

Luni
Lamboglia (1958) 263, with fig. in text.

Ostia
Squarciapino (1951) *passim.*
Lamboglia (1958) 278, 283–5, 294, with figs. in text; *id.* (1963) 154, 157–8 (figs. in text).

Pianopoli (Catanzaro)
FA ix (1954) 540, fig. 154, ref. 7666.

Pollenzo
Lamboglia (1958) 280.

Rome
(G. B. De Rossi) *Bull. arch. crist.*, 1871, 76–77, pl. VI, 3.
O. Marucchi & E. Stevenson, *id.*, 1878, 56–57, pl. II.
R. Garrucci, *Storia della arte cristiana* vi (Prato, 1880), pl. 465.
De Waal (1904) 311–12, pls. II–III.
Pagenstecher (1909) 180–1; *id.* (1912) 171, fig. 23.
NSc, 1910, 502, fig. 8.
K. A. Neugebauer, *Führer durch das Antiquarium* ii, *Vasen* (Berlin, 1932) 210, no. 30.003.
Squarciapino (1951) 135, 139–40.
Toynbee (1957) *passim.*
Vermaseren & Van Essen (1965) 368–81, 395, 420–8, 449–60, 480 *passim*, pls. 86–87, 128.2,4 (many identifications uncertain).
G. Carettoni, *NSc*, 1967, 302–4, figs. 20–24.
Opuscula Romana vi (1968) 85, pl. VII, fig. 3 left.

Sperlonga
G. Iacopi, *L'antro di Tiberio a Sperlonga* (Rome, 1963) 157–60, figs. 157–60, 169–70. Fig. 170 perhaps TS grise.
Id., *L'antro di Tiberio e il museo archeologico nazionale di Sperlonga* (Itinerari . . . , no. 107; Rome, 1965) 22, figs. 61–62.

Sutri region
G. C. Duncan, *PBSR* xxvi (1958) 94–95 and *passim*, fig. 7 c (distribution map). Refs. under 'Red Polished Ware'.

Sybaris(?)
D. W. Ridgway, in F. G. Rainey & C. M. Lerici, *The Search for Sybaris, 1960–1965* (Rome, 1968) 297, pl. 25 a.

Todi (Umbria)
CVA musei comunali umbri (=Italia fasc. XVI), Todi, pl. 16.1.

Trieste (museum)
Waagé (1948) 45. Ref. to RS.

Vado
N. Lamboglia, *Riv. Ing. Intem.* (=*Riv. st. lig.*) vii (1941) 23–27; Lamboglia, *Vado Romana* (Bordighera, 1940) 14, fig. 7,e; *id.* (1958) 278–9.
Lamboglia (1963) 148–9, 151, 203.

Veii and Ager Veientanus
PBSR xxviii (1960) 69; *id.* xxxvi (1968) 12–13, 151–3 and *passim*, figs. 1, 32–33. Refs. under 'Red Polished Ware' and 'Rilled Ware'.

Italy *cont.*

Ventimiglia

P. Barocelli, *Mon. ant.* xxix (1923) 129–31, 136, figs. 40 d, 45 g.
Lamboglia (1941); *id.* (1958); *id.* (1963) *passim.*
Lamboglia (1950) *passim.* Includes TS grise, and one possible example of LRC (p. 176, fig. 101.12=Lamboglia (1963) 177, form 33).
Pallarés (1959: 1) 127–8, with fig. in text; *id.* (1959: 2) 233–4.
N. Lamboglia, *Riv. st. lig.* xxviii (1962) 270–90 *passim.*

SICILY

Note: all examples are RS, unless stated otherwise.

Barrafranca
NSc, 1956, 167, fig. 2 b. Tripolitanian RS?

Catania
NSc, 1956, 179, fig. 15 right.

Còmiso
NSc, 1937, 465, no. 1, fig. 8, top.

Eloro
Mon. ant. xlvii (1966) 294, no. 13, fig. 50.

Floridia
NSc, 1912, 358, fig. 12.

Lilybaeum
NSc, 1966, 344, fig. 29; *id.*, 1967, fig. 14 on p. 388, l, m, o, etc.

Lipari
L. Bernabò Brea & M. Cavalier, *Meligunìs-Lipára* ii (Palermo, 1965) 14–15, 46, 52–53, 263, pls. 223.9, 225.1b–c, 3h, and pl. j,13.

Marzameni
Archaeology xxii.2 (April 1969) 125, with fig. in text.

Motya
Mozia ii (Studi semitici, 19; Rome 1965) 13–21, pls. VII–XVII, *passim* (under 'ceramica aretina d'imitazione').

Panarea
L. Bernabò Brea, *NSc*, 1947, 227, fig. 6.

Piazza Armerina
G. V. Gentili, *NSc*, 1950, 293, 334, figs. 1, 30.

Sofiana
D. Adamesteanu, *Boll. d'arte* xlviii (1963) 264, 273, fig. 8.

Sortino area
Riv. arch. crist. xxxix (1963) 126–7, fig. 14.

Syracuse
NSc, 1951, 273, 329; *id.*, 1954, 320–5, 329–30, fig. 17.4–7 (fig. 17.7=LRC); *id.*, 1956, 115, fig. 6.4.
Lamboglia (1963) 154, with fig. in text.

Tusa
G. Carettoni, *NSc*, 1961, 278, 283, fig. 19a–d.

MALTA

Birzebbugia
T. Ashby, *JRS* v (1915) 58, 66, fig. 24. RS.

Rabat
T. Zammit, *Ant. J.* iii (1923) 223–5, fig. 5. RS.

Ras il-Wardija (Gozo)
Missione archeologica italiana a Malta: Rapporto preliminare della campagna di scavi 1966 (Rome, 1967) 93, fig. 14.4, pl. 76.2. RS.

S. Paolo Milqi
Id. . . . 1965 (Rome, 1966) 113–4, fig. 7.8; *id. . . 1966* 68, fig. 9.18, 20, pl. 54.2. RS, LRC.

Malta *cont.*

Tas-Silg

Missione archeologica italiana a Malta: Rapporto preliminare della campagna di scavi 1963 (Rome, 1964) 56, fig. 16.4–11, pl. 16.2 (cf. also pl. 50.2); *id.* . . . *1964* (Rome, 1965) 48, pl. 49.2; *id.* . . . *1966* (Rome, 1967) 35, fig. 6.21–28, pl. 23.5. RS, Tripolitanian RS, possibly LRC.

For finds from other sites, see *Museum Report*, 1954/55, p. 11; *id.*, 1960, pp. 7–8. RS.

DALMATIA

General:

Čremošnik (1966).

Argyruntum (*Starigrad*)

A. Colnago, *JÖAI* xviii (1915), Beiblatt 180, fig. 92. RS?

Bugojno

J. Petrović, *Glasnik Sarajevu* xiii (1958) 268, 271, pl. I, 2. RS.

Doclea

A. Cermanović & others, *Inv. Archaeologica, Jugoslavija* fasc. 8 (1965) sheets Y 75, no. 5, and Y 77, nos. 2–4. Imitations of RS.

Maslenica (Jesenice region)

A. Colnago, *JÖAI* xviii (1915), Beiblatt 177–8, figs. 87 a, 88 a. Perhaps RS.

Predjama

J. Korošec, *Arheološke Ostaline v Predjami* (*The Archaeological Remains at Predjama*) (Rasprave (Dissertationes) iv.1; Ljubljana, 1956) 42, 61, pls. XV–XVI, XIX, 6. RS.

Salona

E. Dyggve & R. Egger, *Forschungen in Salona* iii (Wien, 1939) 49, fig. 65. RS.

Split (museum)

Waagé (1948) 45, 52. RS, LRC.

Fremersdorf (1958) 16, pl. 4.11. RS.

Višići

Čremošnik (1962) *passim.* RS (incl. plain versions); also some Eastern Sig. B (Types 4, 7, 'Hofheim 97Ab'), etc.

Zecovi (near Prijedor)

A. Benac, *Glasnik Sarajevu* xi (1956) 151, 165, pl. II, 3–5. RS.

GREECE AND AEGEAN REGION

General:

J. W. Hayes, *RCRF Acta* v–vi (1963–4) 33–36.

Athens

PAE, 1914, 95, fig. 10.3. RS.

Kübler (1931). Local stamped ware; a little RS (fig. 3.2–6; Beil. XXXVI A, 1–5), two LRC sherds (pp. 80, 84, pl. 3.7, Beil. XXXVI A, 6 & B, 4).

Waagé (1933). Çandarli, RS, LRC, local stamped ware; no. 290 is Cypriot RS.

Hesperia xii (1943) 371, fig. 65. RS.

Hesperia xviii (1949) 217, pl. 41.2 (middle of second row). Çandarli.

Fremersdorf (1958) 15, fig. 1 d. RS.

Robinson (1959) *passim.* Çandarli, RS, LRC, local imitations and stamped ware.

Butrinto (Albania)

L. M. Ugolini, *L'acropoli di Butrinto* (*Albania Antica* iii; Rome, 1942) 194, no. 77, fig. 199, bottom left. LRC.

Çandarlı

Loeschcke (1912) *passim.* Çandarli (1st & early 2nd cent. types).

Corfu (*Kerkyra*)

BCH 86 (1962), 751, fig. 6 (on p. 753). RS.

Crete (various sites)

M. S. F. Hood, *BSA* lxii (1967) 50–56 *passim*, fig. 5. RS, LRC.

Delphi

BCH 74 (1950) 327, fig. 29. 'Local' painted dish.

Ephesos

Fuhrmann (1940) 93–99, pls. 10–11; Salomonson (1962) 53–54, 65, pls. XI,1, XIII,3, XIX,1. RS.

Gortyna (Crete)

Rizza & Scrinari, *Il santuario sull'acropoli di Gortina* i (Rome, 1968) 78, figs. 52, 127 bottom. RS, LRC.

Greece and Aegean *cont.*

Halae (Boeotia)
Hesperia ix (1940) 499, fig. 241.15. RS.

Iasos
D. Levi, *Annuario sc. Atene* xxxix–xl (1961–2) 553–4, fig. 80. RS.

Ithaki
S. Benton, *BSA* xxxix (1938–9) 36, fig. 18, no. 55. RS.

Knossos (Crete)
D. E. Johnston, *BSA* lvii (1962) 221–2, figs. 13, 14. RS, LRC.

Labraunda
Hellström (1965) 40–44, 73–4, nos. 322–336, pls. 16, 37. RS, LRC. Note: no. 329 is LRC.

Leros
J. L. Benson, *Ancient Leros* (Greek, Roman and Byzantine Monographs, no. 3; Durham, N. Carolina, 1963) 56, pl. 15, fig. 2j–l, and pl. 16, fig. 2c–e,g. RS, LRC.

Methymna (Lesbos)
W. Lamb & F. N. Pryce, *JHS* lx (1940) 97–98, fig. 1.8, 10, 20. Çandarli, LRC

Naxos
PAE, 1963, pl. 138 B, top left. LRC.

Olympia
H. Walter, *Olympiabericht* vi (1958) 60, 67–70, figs. 47e, 49, 61–63. RS.

Patras
Arch. Delt. xvi (1960) *Chronika* 144, pl. 121ζ. RS.

Pergamon
A. Conze, *Altertümer von Pergamon* i (Berlin, 1913) 269, with fig. in text (Çandarli), and p. 322, fig. 110. LRC.

Phoinike (Albania)
Ugolini, *Albania Antica* ii (1932) 190. Stamped frs. (ware uncertain).

Porto Rafti (Attica)
M. S. F. Hood, *Acta mus. nat. Pragae* xx (1966) 170–1, fig. 18, b. RS, LRC.

Priene
H. Dragendorff, *BJ* ci (1897) 141, fig. 1.8; R. Zahn, in T. Wiegand & H. Schrader, *Priene* (Berlin, 1904) 438, fig. 551, no. 164. LRC.

Rhodes
P. V. C. Baur, *Cat. Stoddard Coll.* 252, 254, figs. 109–110. RS.
W. Technau, *AM* liv (1929) 50, Abb. 41, Beil. XXVI, 2; J. H. Iliffe, *QDAP* vi (1938) 18, fig. 1 (corrected profile). RS.

Saloniki (*Thessalonica*)
Ph. Petsas, *Arch. Delt.* xxi (1966), *Chronika* 334 ff, pls. 343.6, 350.2–3,5, 355.3–4. RS, LRC, Macedonian TS grise (pl. 355.4).

Samos
W. Technau, *AM* liv (1929) 51, fig. 43.3. Çandarli?
A. M. Schneider, *AM* liv (1929) 127–8, nos. 5, 6, figs. 19–20. LRC.

Siphnos
J. K. Brock, *BSA* xliv (1949) 70–72, fig. 15, pl. 22 (nos. 13, 14, 26, 29, 34, 35). RS, LRC, Athenian painted ware.

Smyrna
Wulff (1909) 293, no. 1561, pl. LXX. LRC.
Holwerda 34, pl. III, nos. 394–5. Çandarli.

Svilengrad (*Mezek*), Bulgaria
Bull. inst. arch. bulgare xi (1937) 163, fig. 156.1. Çandarli.

Yassı Ada (Bodrum)
G. F. Bass, *AAnz.*, 1962, 556, fig. 9. RS.
G. F. Bass, *AJA* lxxv (1971) 34–5, pl. 2, figs. 13–16. RS, Cypriot RS.

CONSTANTINOPLE

R. B. K. Stevenson, in *The Great Palace of the Byzantine Emperors, First Report* (Oxford, 1947) 31–32, 62–63, pls. 19.26–34, 27 fig. 9. LRC.
(J. W. Hayes) *DOP* xix (1965) 235, fig. D; *id.* xx (1966) 229; *id.* xxi (1967) 278, fig. 23. RS, LRC, etc.
J. W. Hayes, *DOP* xxii (1968) 208–12, 215–16, nos. 40–99, figs. E–G, and 20–21. Various wares.
İstanbul Arkeoloji Müzesi Yıllığı 13–14 (1965–6), 78–9 & 218–19. RS, LRC.

SOUTHERN AND CENTRAL TURKEY

Alişar Hüyük
F. O. Waagé in H. H. von der Osten *et al.*, *The Alishar Hüyük: Seasons of 1930–32*, III (Chicago, 1937) 83 ff, figs. 81.40(?), 85.1, 86.7. LRC, Çandarli(?).
Ankara
AAnz., 1932, 259, fig. 11, no. 22. Perhaps Çandarli ware?
Örengeri region
L. Eisbach, *Ayasofya Müzesi Yıllığı* vi (1965) 98–9, fig. 1. RS.
Tarsus
Jones (1950) 203–5, 276–7, figs. 163–6, 207–8. RS, LRC, Cypriot RS.

CYPRUS

Kornos Cave
H. W. Catling & A. I. Dikigoropoulos, *Levant* ii (1970) 40–47, 54–56 *passim*, fig. 3, pl. XXX. Cypriot RS, etc.
Salamis
Ibid. 54–56, fig. 7. Cypriot RS; fig. 7.6 is RS.
Soli
A. Westholm, *The Temples of Soli* (Stockholm, 1936) 121–2, 145, pl. XXX. RS.

SYRIA

Al-Mina
A. Lane, *Archaeologia* lxxxvii (1937) 27–28, fig. 14K, L. LRC.
Antioch
F. O. Waagé, in *Antioch-on-the-Orontes* i (Princeton, (1934) 72–73, pl. XIV, no. 18. RS, possibly Cypriot RS.
Waagé (1948) 41–59, figs. 26–35, pls. VII–XI. RS, LRC, Cypriot RS, Egyptian C; one possible piece of Çandarli (42, pl. VII, RM 1); also other wares (50, LB 16; pp. 58–59, 'Coptic' series).
Byblos
M. Dunand, *Fouilles de Byblos* i (1926–32) (Paris, 1939) 23, fig. 10, no. 1084. LRC.
Dura-Europos
Cox (1949) 15–16, pl. V, nos. 90–95. RS; sherd of LRC (5th century).
Ghiné (Lebanon)
M. H. Chebab, *Bulletin du Musée de Beyrouth* xiv (1958) (*Mosaïques du Liban*) 157, pl. CIII,7. LRC.
Hama
H. Ingholt, *Rapport préliminaire sur la première campagne des fouilles à Hama* (København, 1934) 19. Stamped frs. (ware uncertain).
Homs (Emesa)
S. & A. Abdul-Hak, *Cat. illustré du . . . Musée de Damas* 85–6, no. 31. RS.
Tabbat al-Hammām
Syria xxi (1940) 188, fig. 2.3,6. LRC.
Tell Fakhariyah
Kantor (1958), 30–41 *passim*, pls. 29, 32, 42, nos. 15, 16, 19, 21, 60, 66, 71, 126. RS, LRC, Cypriot RS.

PALESTINE

General:
Bagatti (1953).
Ain Beit Surik (*Emmaus* area)
Bagatti (1953) 70, pl. XVII b, nos. 3–6 (excl. 5?). RS, LRC, etc.
Ashdod
M. Dothan & D. N. Freedman, *Ashdod* i=*'Atiqot* (English series) vii (1967) fig. 13.1. Probably LRC.
Beit Alpha
Bagatti (1953) 71, pl. XVII a. RS.
Beit Jala
C. Clermont-Ganneau, *Archaeological Researches in Palestine during the years 1873–1874* i (London, 1899) 458, fig. in text. RS.
Beitin
Bagatti (1953) 70, 72, pl. XVII b, 5?, pl. XVIII, 7. LRC, etc.

Palestine *cont.*

Beit-Shean

G. M. Fitzgerald, *Beth-Shan Excavations 1921–1923* iii, *The Arab and Byzantine levels* (Philadelphia, 1931) 38, pls. XXX 18–19, XXXI 15–16, XXXIV 44, 46–48, and stamps. RS, LRC, Cypriot(?), and perhaps imitations.

Beth She'arim

N. Avigad, *Eretz-Israel* iv (1956) fig. 3.16–19. RS, etc.

Bethany

Bagatti (1953) *passim;* S. J. Saller, *Studii Biblici Franciscani Liber Annuus* iii (1952–3) 25, fig. 11; Saller, *Excavations at Bethany (1949–53)* (Publ. Stud. Bibl. Franciscanum 12, Jerusalem, 1957) 257–64, fig. 49, pl. 120 b. RS, LRC, Cypriot, Egyptian C?

Bethlehem area

Bagatti (1953) 73, pl. XVIII 14–16, 24–25; P. V. Corbo, *Gli scavi di Kh. Siyar el-Ghanam e i monasteri dei dintorni* (Publ. Stud. Bibl. Franciscanum 11, Jerusalem, 1955) 68, 70, 77, figs. 20 (?), 22, 26, pls. 22 (photo 67), 24 (ph. 71), 27 (ph. 76.11). RS, LRC.

Gezer

R. A. S. Macalister, *The Excavation of Gezer, 1902–1905 & 1907–1909* (London, 1912) ii 221 and iii pl. 182.5. Cypriot?

Jericho

E. Sellin & C. Watzinger, *Jericho: die Ergebnisse der Ausgrabungen* (Leipzig, 1913) 162–4, figs. 197, 202–6 *passim.* RS, LRC, Cypriot?

J. L. Kelso & D. C. Baramki, 'Excavations at New Testament Jericho and Khirbet en-Nitla', *Annual of the American Schools of Oriental Research* xxix–xxx (1949–51) 26, 34–5, pls. 23, 32 ('Alayiq type 5, Nitla types 14, 15). LRC.

Bagatti (1953) 73, pl. XVIII, no. 23. LRC.

Jerusalem

F. J. Bliss & A. C. Dickie, *Excavations at Jerusalem, 1894–1897* (London, 1898) 265, pl. XXVII 51; Bagatti (1953) 72, pl. XVIII, no. 5. RS?

G. M. Fitzgerald, in *Palestine Exploration Fund Annual* v (1927) 71, 73, 79, pls. XII 22, 24, XIII 8, 16, XIV 3–7, 21; Bagatti (1953) 72–3, pl. XVIII, nos. 6, 9. RS, LRC.

P. B. Bagatti & J. T. Milik, *Gli scavi del 'Dominus Flevit'* i, *La necropoli del periodo romano* (Publ. Studium Biblicum Franciscanum 13, Jerusalem, 1958) 136, fig. 32.10,12. LRC, Cypriot?

Khirbat al-Karak

Delougaz (1960) 32, pls. 31–33, 52–54, 61. RS, LRC, Cypriot, Egyptian C ('soft tan ware').

Khisfine (Galilee)

Abdul-Hak, *Cat. illustré du . . . Musée de Damas* 82, no. 1, pl. XLII,1, top centre. RS.

Libb, Musheirfeh, etc. (Jordan)

N. Glueck, *Ann. Amer. Schools Or. Res.* xiv (1934) pl. 28.8–9 (perhaps others). RS.

Madaba

P. B. Bagatti, *Il museo della Flagellazione* (Jerusalem, 1939) 202; S. J. Saller & P. B. Bagatti, *The Town of Nebo & Other Ancient Christian Monuments in Transjordan* (Jerusalem, 1949) 227, pl. 53.1; Bagatti (1953) 73, pl. XVIII, nos. 22, 26. LRC.

Mambre

E. Mader, *Mambre* (Freiburg im B., 1957) 149, pl. LXXXV (155), m–n. RS.

Ma'on (Menois)

Bull. of the Hebrew University, Jerusalem (Dept. of Archaeology) iii (1960) 12, fig. 5.10–11. LRC?, Cypriot.

Mount Nebo

H. Schneider, *The Memorial of Moses on Mount Nebo* iii, *The Pottery* (Publ. St. Bibl. Franciscanum 1, Jerusalem, 1950) 103–7, fig. 12, pl. 158 a, nos. 448–55; Bagatti (1953) 70–74 *passim,* pl. XVII b, 8, 11, pl. XVIII 2–3, 20. RS, LRC.

Nazareth

P. B. Bagatti, *Gli scavi di Nazaret* i (Publ. Studium Biblicum Franciscanum 17, Jerusalem, 1967) 130, 279–285 *passim,* figs. 79.28, 227–231 *passim,* 236.27, pl. V 1–2. RS, LRC, Cypriot (note: some profiles are restored).

Nessana (Auja Hafir)

Nessana i 276–7, pls. 48, 49, 51, 58, 59 *passim.* RS, LRC, Cypriot.

Petra

G. & A. Horsfield, *QDAP* ix (1941) 155, fig. 19, pl. XXVII, nos. 211, 215. RS, LRC.

P. C. Hammond, *The Excavation of the Main Theater at Petra, 1961–1962, Final Report* (London, 1965) 17, pl. LIII 3a–b. RS.

Palestine *cont.*

Rafa
Iliffe, *QDAP* vi (1938) 17. RS.

Ramat Raḥel
Bull. Israel Exploration Society xix 3–4 (1955) 160, pl. VII 3; *Illustrated London News*, 17 Dec. 1960, p. 1098, figs. 14–15; Y. Aharoni *et al.*, *Excavations at Ramat Raḥel, Seasons 1959 and 1960* (Rome, 1962) 89, figs. 3.8, 17.5, 18.9–11, 13, pl. 26.1–2. RS, LRC, Cypriot.

Samaria-Sebaste
Samaria-Sebaste iii (1957) 344–5, 357–61, fig. 83.11, 24–25, fig. 84 (excl. 7–8), pl. XXII 5–7. Çandarli, RS, LRC, Cypriot. Further ref.: Iliffe, *QDAP* vi (1938) 17.

Sha'ar ha-'Aliya (Shikmona)
Bull. Israel Exploration Society xviii 3–4 (1954) 222, pl. X, fig. 5. RS.

Silet edh-Dhahr
O. R. Sellers & D. C. Baramki, *Bull. Amer. Schools of Oriental Research*, Supplementary Studies nos. 15–16 (New Haven, 1953) 12 ff., figs. 17 (no. 310), 29.3, 5, 8, 11, 30.1, 3, 8. LRC, Cypriot.

Tabgha (Galilee)
A. M. Schneider, *Die Brotvermehrungskirche* . . . 30 (English ed., p. 32) fig. 17. RS (for full ref. see Form 104.28).

Tell en-Naṣbeh
J. C. Wampler, *Tell en-Naṣbeh* ii, *The Pottery* (Berkeley & New Haven, 1947) 186, pl. 79, no. 1842. LRC.

Tell Qasile
B. Maisler, *Eretz-Israel* i (1951) 69–70, fig. 27, pl. XII, 4. RS?, LRC, Cypriot.

Tyre
Bagatti (1953) 73, pl. 18.21.

EGYPT AND NUBIA

General:
Adams (1962).

Abu Mena
J. Engemann, *Mitt. d. Inst. Kairo* xxi (1966) 186–7. RS, LRC, Cypriot, etc.

Alexandria
Sieglin Expedition ii.3, 114–6, figs. 125, 126, 128, and p. 148, figs. 159, 161, nos. 28, 33, 35. RS; one fr. Cypriot (fig. 159.28).

Aphroditopolis (Kom Iskaw)
J. Strzygowski, *Koptische Kunst* 247, fig. 304, nos. 7136–8. RS and copies.

Arminna West
B. C. Trigger, *The Late Nubian Settlement at Arminna West* (New Haven & Philadelphia, 1967) 38, pl. XIX,g. Egyptian A.

Aswan
Wace (1948) 52. Ref. to RS.

Athribis
Salomonson (1962) 59, pl. XIV,1–2. RS.

Axum (Ethiopia)
R. Zahn, in (D. Krencker) *Deutsche Aksum-Expedition* ii, *Ältere Denkmäler Nordabessiniens* (Berlin, 1913) 208 (no. 92), 217, pl. 28.4. Probably RS.

Ballana
Emery & Kirwan (1938) 81, 121, 150, 159, 395–6, pl. 114, type 88a–c. RS.

Cairo
Wulff (1909) 293, no. 1562. Egyptian A or B.

Cheikh Daud
Presedo Velo (1964) 47–51, figs. 9–11 *passim*. Egyptian A.

Coptos
Dalton (1901) 162, no. 927. RS.
Walters (1908) 41, L 157–8, figs. 32–33. RS.

Eastern Delta region
E. Neuffer, *Mitt. d. Inst. Kairo* ii.1 (1931) 64, fig. 8.4. Cypriot.

Edfu
Tell Edfou, 1937, 125, pl. 38.6–7, etc. Egyptian A.
Wace (1948) 54, n. 2; Allais (1959) 47, fig. 4; Salomonson (1962) 73, pl. XXIII, 1. RS.

Egypt and Nubia *cont.*

Faras

F. Ll. Griffith, *LAAA* xiv (1927) 72 ff., pls. LIX, 15–17, LX, 15–17. Egyptian A.
K. Michalowski, *Faras: Fouilles polonaises 1961–1962* (Warsaw, 1965) 129, pls. 50.6, 51.1. RS, Egyptian A.

Giza

Wulff (1909) 293, no. 1559 (fig. in text). Egyptian A or B.

Heracleopolis Magna (*Ehnasya*)

W. M. F. Petrie, *Ehnasya, 1904* (London, 1905) 30, pl. XXX,1 (RS), 2–3 (Egyptian A).

Hermonthis (*Armant*)

O. H. Myers & H. W. Fairman, *JEA* xvii (1931) 229, pl. 47; Sir Robert Mond & O. H. Myers, *The Bucheum* (London, 1934) iii pls. 128, 135, 154, 158 *passim*. Egyptian A, etc.
Mond & Myers (1940) 79–80, pls. 54–56, 64, 82–83 *passim*. Egyptian A, some RS (pl. 56, 139M 14 apparently Cypriot).

Hermopolis Magna

(ed.) G. Roeder, *Hermopolis, 1929–1939* (Hildesheim, 1959) 336, pl. 82 c–d, h, q–x. RS (h is Cypriot).

Karanis (*Kom Wushim*)

ILN, 27 June 1936, p. 1160, figs. 3–4. RS.
Early Christian & Byzantine Art (exhibition: Baltimore, 1947) 126, no. 641. RS.

Kom el-Ahmar (Damanhur region)

A. el-Mohsen el-Khashab, *Ptolemaic and Roman Baths of Kom el-Ahmar* (*Annales Serv. Antiq. Égypte*, suppl. 10, Cairo, 1949) pl. XXXII, bottom r. RS.

Medamud

F. Bisson de la Roque, *Rapport sur les fouilles de Médamoud* (*1929*) (Cairo, 1930) 62–3, fig. 63; cf. also *ibid.* (*1926*) (Cairo, 1927) 87, no. 1749. RS, Egyptian A.

Medinet Madi

E. Bresciani, *Missione di scavo a Medinet Madi: Rapporto preliminare delle campagne di scavo 1966 e 1967* (Milano-Varese, 1968) 57, no. 91, pl. 68.4. RS.

Nag el-Arab

M. Pellicer & M. Llongueras, *Las necrópolis meroíticas del Grupo 'X' y cristianas de Nag-el-Arab* (Memorias de la Misión Arqueológica en Nubia, V; Madrid, 1965) p. 154, fig. 17.15. Egyptian A.

Oxyrhyncus (*Behnasa*)

Wace (1948) 49, pl. 1, item E. RS.

Panopolis (*Akhmim*)

Wulff (1909) 293, pl. 82, nos. 1556–7. RS.

Thebes (*Luxor*) *and vicinity*

Wulff (1909) 293, pl. 82, no. 1560. RS.
Winlock & Crum (1926) 84–7, fig. 37, pls. XXXI, XXXII B. Egyptian A.

Wadi el-Arab

W. B. Emery & L. P. Kirwan, *The Excavations and Survey between Wadi es-Sebua and Adindan, 1929–1931* (Mission archéologique de Nubie, 1929–1934; Cairo, 1935) 111, 116, 119, 516, figs. 90.13, 101.3. Egyptian A.

CYRENAICA

Benghazi

Notiziario archeologico i (1915) 94, fig. 12.7. RS.

Cyrene

S. Stucchi, *L'Agorà di Cirene* i (Rome, 1965) 336, 345–6, pls. 64.1, 65.4. RS.

Ras el-Hilal

PBSR xxxii (1964) 11–12. RS., LRC, Egyptian A.

Tocra

G. R. H. Wright, *PEQ*, Jan.–June 1963, fig. 3 (on p. 31). RS.

BLACK SEA COASTS

Apollonia Pontica

J. Frel, *Bull. inst. arch. bulgare* xxiii (1960) 245, fig. 5, no. 27. LRC.

Callatis

Dacia ii (1925) 135, fig. 55.8. LRC?
T. Sauciuc-Săveanu, *Dacia* iii–iv (1927–32) 431–3, figs. 36–38, and p. 471, fig. 46.15–16. LRC.
Dacia v–vi (1935–6) fig. 26 (on p. 315), bottom l. LRC.

Black Sea Coasts *cont.*

Cherson
Materiali 34, p. 215, fig. 64 b. LRC.
Dinogetia-Bisericuța (Garvăn)
G. Ştefan, *Dacia* xi–xii (1945–7) 305–6, figs. 3–4. LRC.
Mat. și cerc. arh. viii (1962) 678, fig. 5. RS.
Ilyrat
Materiali 85, pp. 296–7, 301, 309–10, figs. 11, 15.1, 20. Çandarli, LRC.
Inkerman region
Arch. Pamatki xiii (Kiev, 1963) 24, fig. 13.1 & 1a. RS.
Istros (Histria)
Mat. și cerc. arh. iv (1957) 29, fig. 12. Çandarli.
Id. vi (1959) 277, fig. 3.1. RS or imitation.
Popescu (1965). RS, LRC.
Mirmeki
Knipovich (1952) 303–5, figs. 3.4–5, 5.2–3, types 13, 17. Çandarli.
Novae
Archeologia (Warsaw) xiii (1962) 117–8, pls. IX,7, XI,13. RS.
Olbia
Knipovich (1929) 47–48, fig. 11, pl. VI 7 (Çandarli), and p. 50, fig. 12.6 (LRC).
Holwerda (1936) 50, fig. 9, pl. VI, no. 700. RS.
Panticapaeum
AAnz., 1909, p. 155, fig. 21. LRC.
Materiali 56, p. 153, fig. 6.1. LRC?
Poïana
R. & E. Vulpe, *Dacia* iii–iv (1927–32) 314, fig. 92.6. LRC.
Sucidava
D. Tudor, *Dacia* xi–xii (1945–7) 171, no. 8, fig. 22.1. LRC.
Mat. și cerc. arh. (*Mat. arh. privind istoria veche a R.P.R.*) i (1953) 712, nos. 4, 5, 9, fig. 13d,h,i. LRC, Macedonian t.s. grise?
Tanais
T. N. Knipovich, *Tanais* (Moscow, 1949; in Russian) 70–1, fig. 26.5–6. LRC.
Tiritaka
Knipovich (1952) 315–17, types 14, 18 (Çandarli), and pp. 319–21, figs. 13–14, type 24 (LRC).
Materiali 4, p. 51, fig. 73; *id.* 25, p. 42, fig. 40; and p. 126, figs. 160–1; *id.* 69, p. 236, fig. 107. LRC.
Tyras
P. Nicorescu, *Dacia* iii–iv (1927–32) 588, fig. 87, no. 63. RS.

AUSTRIA AND SWITZERLAND

Aguntum
W. Alzinger, *Kleinfunde von Aguntum aus den Jahren 1950 bis 1952* (Wien, 1955) 14, pl. 2, no. 68. RS.
Carnuntum
Zingerle (1907) 330–344, pl. VIII; M. von Groller, *Der römische Limes in Österreich* ix (1908) 71–74, figs. 31–32; Salomonson (1962) 69, 74, 86, pl. XXI,4. RS.
Chur
E. Ettlinger, 'Nordafrikanische Sigillata in Chur', *Ur-Schweiz* xxvii, 2–3 (1963) 29–33. RS.
Moosberg (Bayern), Lorenzberg (Bayern), Bregenz, Geneva
E. Ettlinger, *Jahrbuch des historischen Vereins für das Fürstentum Liechtenstein* lix (1959) 245; *id.* (1963) *cit.*, 31–32. Refs. to stamped wares, including RS(?).
Schaan
E. Ettlinger (1959) *cit.* 242–9, 294, pls, 1, 6, 12. RS.
Virinum
C. Praschniker & H. Kenner, *Der Bäderbezirk von Virinum* (Wien, 1947) 100, 109, 113, figs. 95, 102. RS.

RHINELAND AND HOLLAND

Ezinge (Holland)
W. Glasbergen, *25ste–28ste Jaarsverslag van de Vereeniging voor Terpenonderzoek* (1940–1944) 339, 361, 366–7, fig. 70 b. RS.
Gelsdorf
O. Jahn, *Jahrbücher des Vereins von Alterthumsfreunden im Rheinlande* (=*BJ*) xxxiii–xxxiv (1863) 229–31, pl. III,2; reproduced in Déchelette (1904) ii 176–7, fig. e.
Godorf
Fremersdorf (1958) 17, fig. 10, pl. 4.10. RS.
Köln
BJ 124 (1917), Beilage 58, fig. 39. RS.
Fremersdorf (1958). RS.
BJ 159 (1959) 155. RS.
Perhaps also: *Sammlung Niessen, Cöln*[3] (Cöln, 1911) nos. 2252–4, pls. 92, 94. RS.

BRITAIN (INCLUDING IRELAND)

Coygan Camp (Carmarthen)
G. J. Wainwright, *Coygan Camp* (Cardiff, 1967) 158, fig. 40.18–21. LRC.
Dinas Powis (Glamorgan)
L. Alcock, *Dinas Powys* (Cardiff, 1963) 126–30, figs. 25–26; *id.*, *Archaeology* xvii (1964) 105–6, fig. 108. RS, LRC.
Garranes (Co. Cork, Ireland)
S. P. O'Ríordáin, *Proceedings of the Royal Irish Academy* xlvii (1941–2), section C, 131–3, fig. 23, no. 249; ref. Thomas (1959) 90. LRC.
Tintagel (Cornwall)
Radford (1956) *passim*. RS, LRC.
Ref. Thomas (1959) 90.

APPENDIX 2

AFRICAN RED SLIP WARE CONCORDANCE OF VESSEL FORMS

(A) LAMBOGLIA'S CLASSIFICATION
(including additions by Pallarés, Carandini)

T.S. chiara 'A'

1	= Form 8 RS	1A	=	8A	
		1B		8A–B	
		1C		8B	
2	9	2A		9A	
		2B		9A–B	
		2C		9B (16)	
2/9	63				
3	14–16	3a		14A–B	
		3b1		15	
		3b2		14C	
		3c		16	
4(/36)	3	4A		3B	
		4B		3C	
5	4(A)				
6	34				
6 var.	36				
7	7	7A		7A	
		7B		7B (5C)	
8	17	8		17A	
		8A		17B	
		8B,C		—	
9a	27				
9b	26				
9A	181				('a vernice interna')
10	19				
10A	23B				('a strisce')
10B	23A				('a strisce')
11	160				
11A	159				
12	158				
13	147				
14	140				
14A	132, 135				
15	123				
16	121				
16*bis*	124				
17	4A variant				

18	= Form 5 RS	18/31	=	5A
		18		5C
		18A		6C
19	21 (body), 22 (lid)			
20	20			
21	10			
21A	cf. 11			
22a	14 (A), 17 variant			
22b	12			
23	6			
24	6C			
24/25	—			
26a	162			
26b	137	Pallarés 26A, B = 137, 138		
27	125			
28 (Pallarés)	136			
30A	155			
30B	161			
30C	157			
33	143			
35	38	('A' decorata)		
36 (see under 4 above)				
39	—	(not RS)		
40(A)	31			
41	33			

T.S. chiara 'C'

9C	49
35	44
35 'a rilievi'	52B
40	50
41	48
42	45
42/48	54
43	17
44	— (? Pontic ware)
4/46	43

(A) *cont.*

T.S. chiara 'D'

1 =	Form 99 RS	(late)	53 =	Form 61B, 104? RS	
9A	64?		54	61(A)	
9B	63		55	104? 105 variant?	
22	—		55A	82	
24	98		55B	88	
24/25	91		56	—	
35	94A?		57	73	
38	91		58	80	
41	67?		59	79	
42	67		60	84, 86, 103	
42A	45C or local fabric		*Supplementary forms* (Carandini)		
48	97		61	182	
51	59B		62	185	
51A	59A		65	28	
51B, C	—		71	183	
52A	58		72	36?	
52B, C	—		73	41?	

For 'T.S. lucente' Form 33, see under Late Roman C Form 1 (no. 8)

(B) WAAGÉ'S CLASSIFICATION (ANTIOCH)
Late Roman A and B Ware (shapes 801—900)

801 =	Form 106 RS			826 =	Form 28, 29 RS
802	105			827	—
803-4	104A			828	84
805	104	805p–u	= 104C	829	83
805x	109			830	61(A)
806	82			831	61
807	48	807a,f(k)		833	181 early var.
			= 48A	834	23B
		807u	= 48B	835	27
808	60			836	50
810	87	810a	= 87C	837	49 var.
		810f	= 87B	838	49
811	76			840	5B
812	45			841	5A-B
813	cf. 42			842	4A
815	—			843	8
816	69			844	16
817	59B			846	6, local wares
818	59A			847	3
819	67			848	44
820	58 (57)			849	52
821	32/58			850	70
822	58 var.			851	93A
823	32/58, 58B			852	107
824	30			853-4	94
825	cf. 13?			856	97

(B) *cont.*

857 = Form	96 RS	
858	93A	
859	93B	
861	52B	
862	93B	
863	85	
865	52, 72A?	
866	72, 73	866a–k = 73
		866u = 72
867	71	
868	68	
869–73	67	
875	95	
876	104C?	
877	103	
878	99	878a = 99A/B
		878f = 99B
		878k, p = 99C

879 = Form	100 RS	
881	—	(not RS)
882	91 var.	
883	91	883k,m = 91B
		883f,p,u = 91C
885	12? 102 var.?	
886	110	
888	9B	
889	64	
890	181 var.	
891	53	
892	81?	
893	81A	
894	—	(local ware)
895	10	
896	9	
897	9A	

Waagé's LA 1=Form 45, LB 2–4=Form 67, LB 5–6=Form 91, LB 11–12=Form 99

APPENDIX 3

LATE ROMAN POTTERY CONCORDANCE OF STAMP TYPES

	Late Roman C	African RS *Style A, etc.*	Gaulish TS grise Rigoir (1960, 39 ff.)
Palm-motifs	**1**	**1–19**	**101–176**
	–	1–2	153?
	1	3	149–51; cf. 156 ff.
	–	4	Cf. 115, 154–5, 160 ff.; also 111–113
	–	5	Cf. 160–1, 165?
	–	8	Cf. 102–110
	–	9	Cf. 119 ff.
	–	10–15	Cf. 123 ff.?
	–	19	144–148
Circles	**2**	**22–29**	**1–4**
	–	22, 42	1
	–	23	3–4?
	2	24	2
Fringed circles	–	**30–40**	**8–15, 27–28, 43–46**
		30	8–9, 27–28
		31	11–14
		32	15
		35	45 (cf. 46)
Rosettes	3	44	5, 23, 24; cf. 42, 87
	–	54 (8 petals)	88 (10 petals)
	–	52–53 (8 petals)	Cf. 90 (6 petals), and also 74?
Toothed ring	–	41	84
Grilles	–	67–70	227–229
Crescents	–	73–74	186–207 *passim*
Chevrons	–	75	Cf. 205–207
	–	77	Cf. 200–204, and 91–108 for individual elements

Stamp types *cont.*

	Late Roman C	African RS *Style D*	Gaulish TS grise Rigoir (1960, 39 ff.)
Other motifs	4?	95	223–226
	16	102	211
	–	104	209
	9?	–	212
	18–19	–	213–216
Hares	35	151–152	218–219
Crude bust	–	243	217

MAPS

SERIES A: 1–18

DISTRIBUTION BY SITES

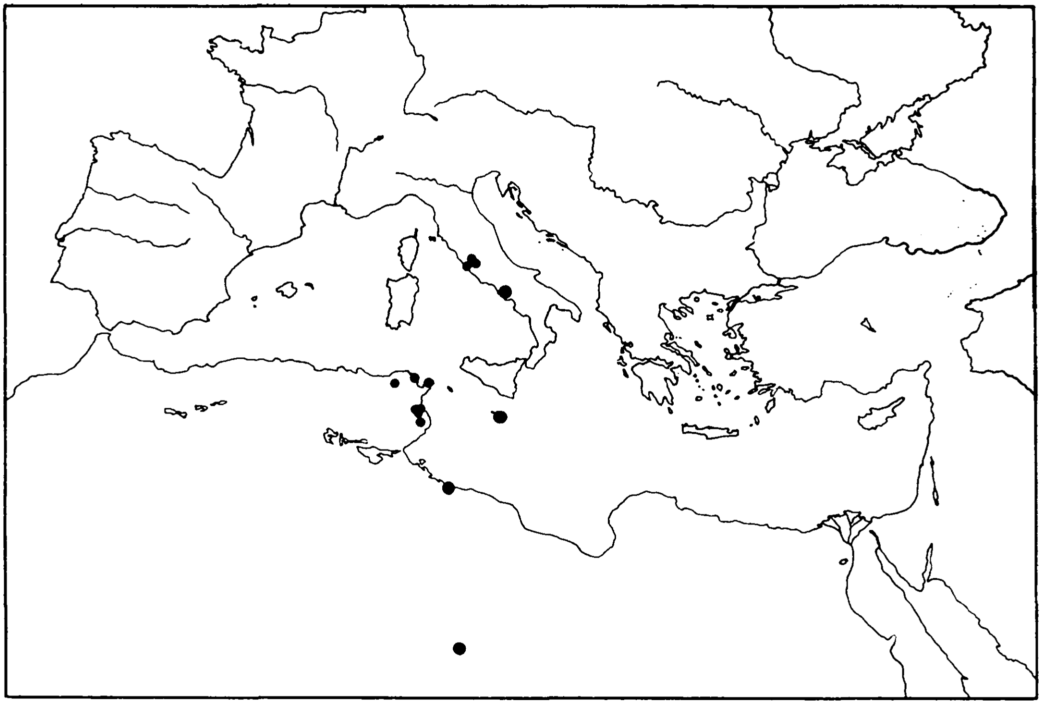
SERIES B: 19–36

APPROXIMATE MAIN AREAS OF DISTRIBUTION

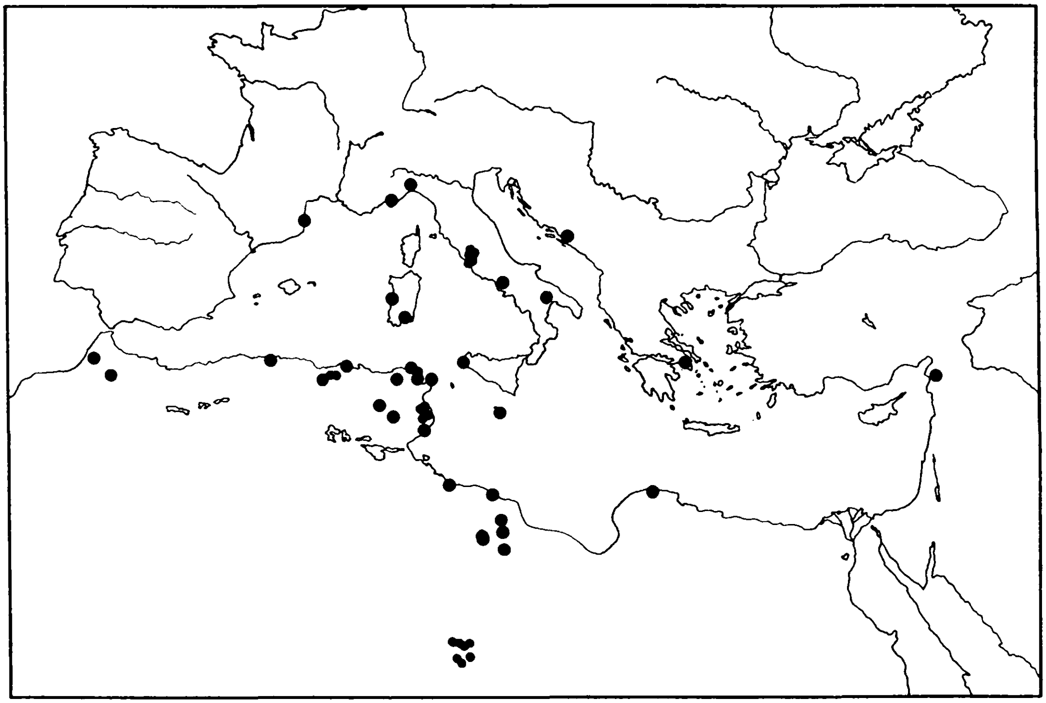
Arrows indicate export beyond

SERIES C: 37–40

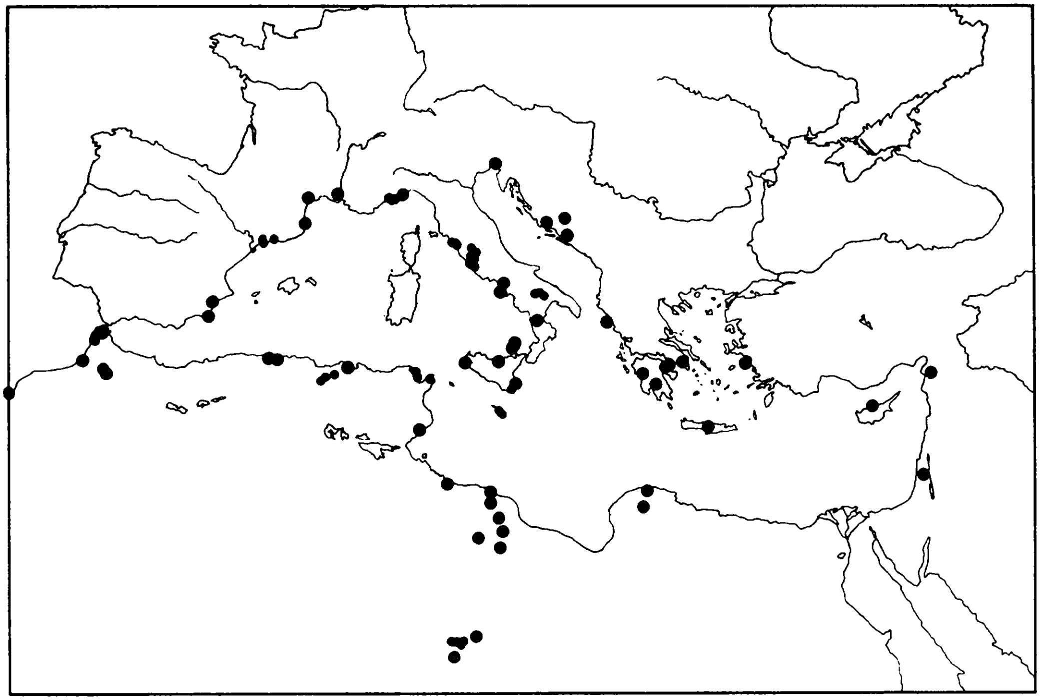
SITE LOCATIONS



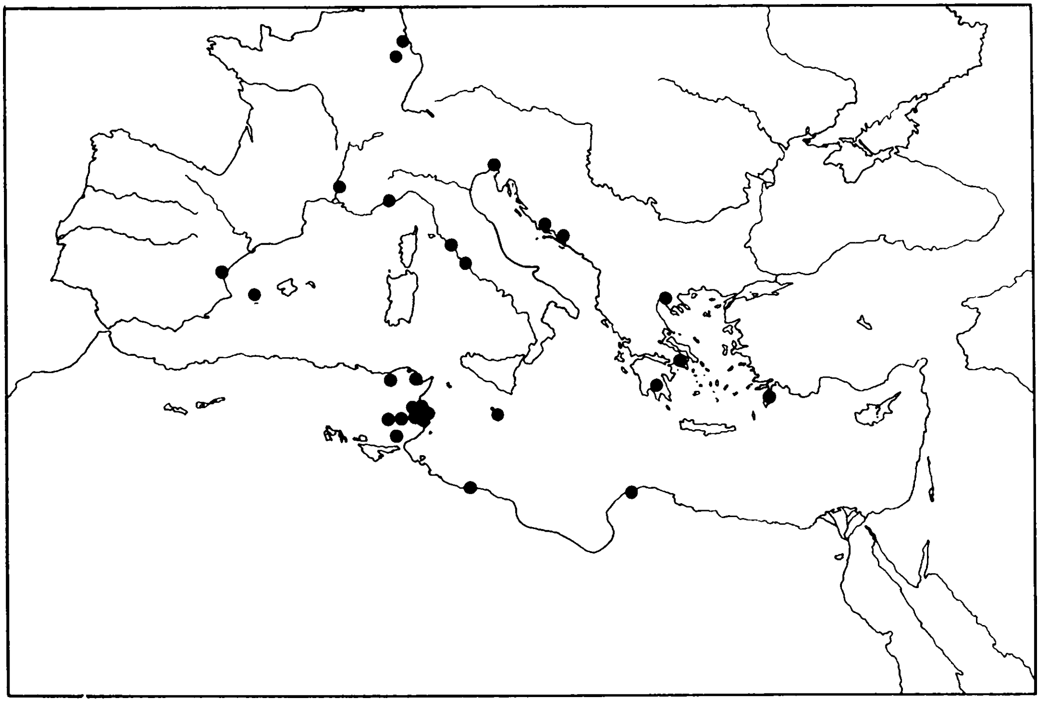
MAP 1 African R.S. Ware, earliest, Forms 1, 2, 3, 151, 161A c. A.D. 60–90



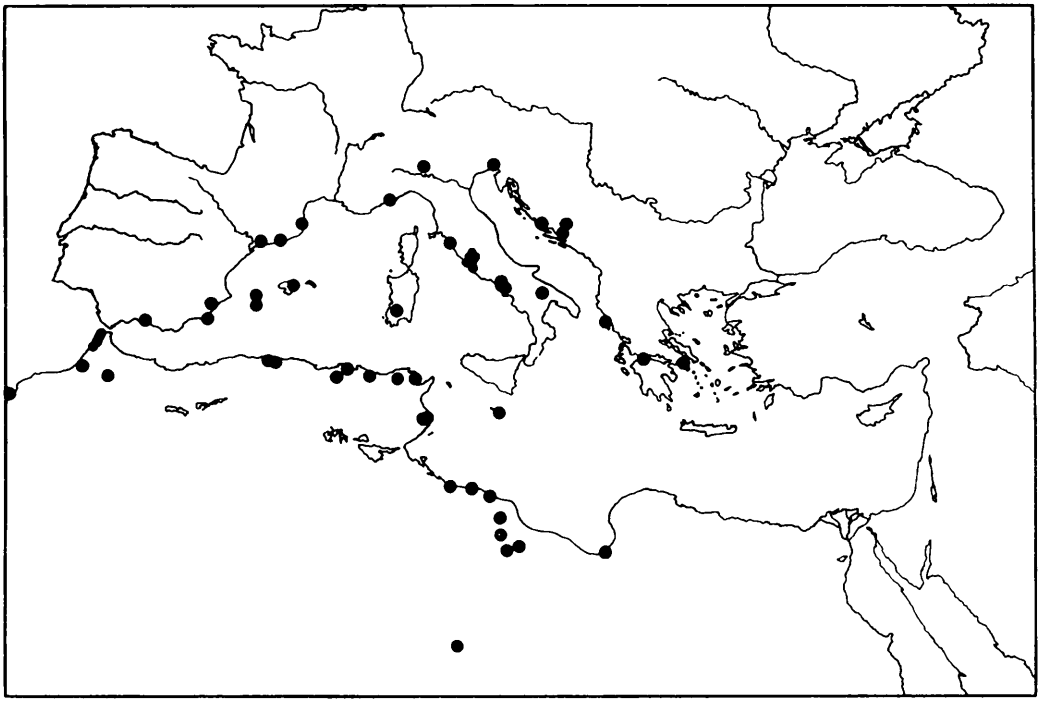
MAP 2 African R.S. Ware, Forms 3B–C, 4A, 5A, 6A About early second century



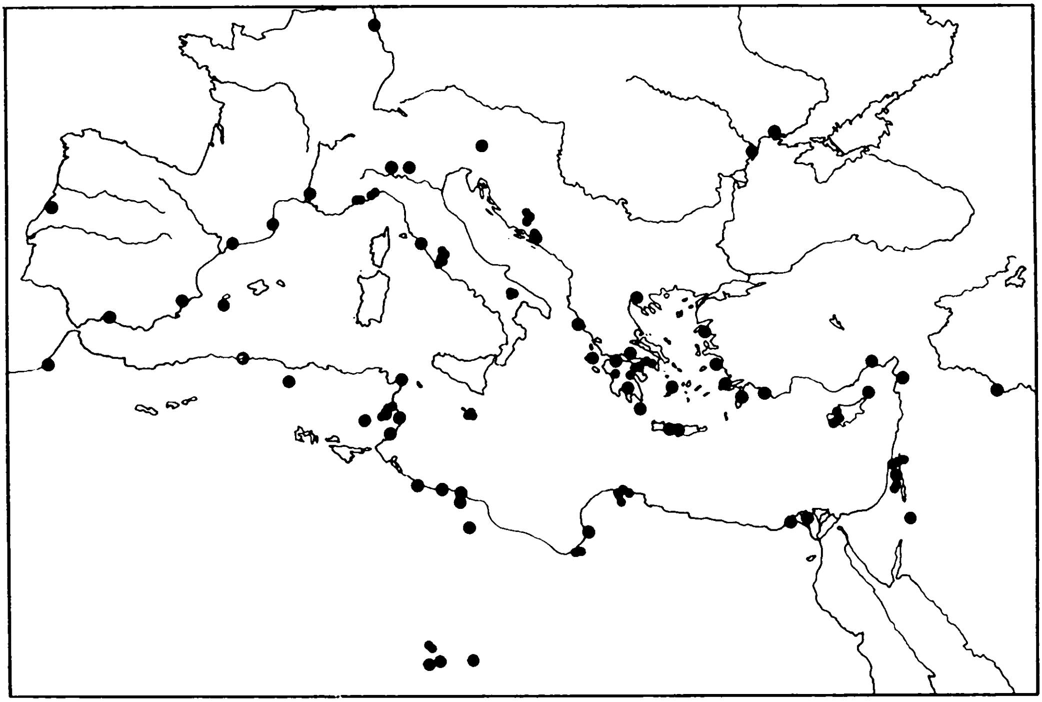
MAP 3 African R.S. Ware, Forms 8A, 9A Second century



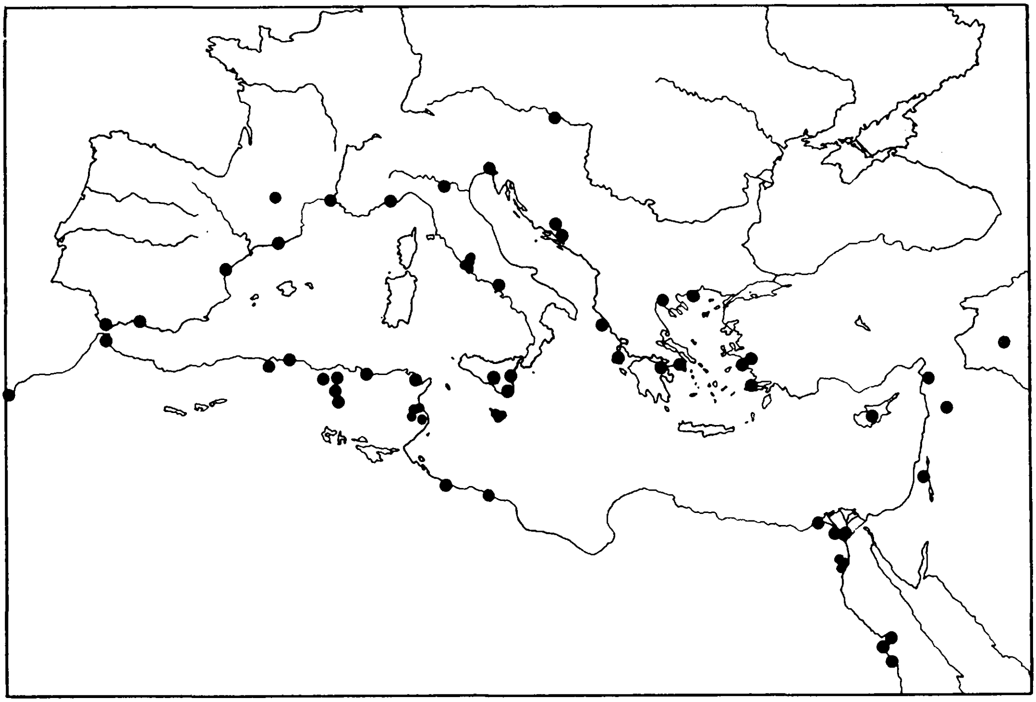
MAP 4 African R.S. Ware, appliqué, Forms 36–41, 171–179 Early to mid third century



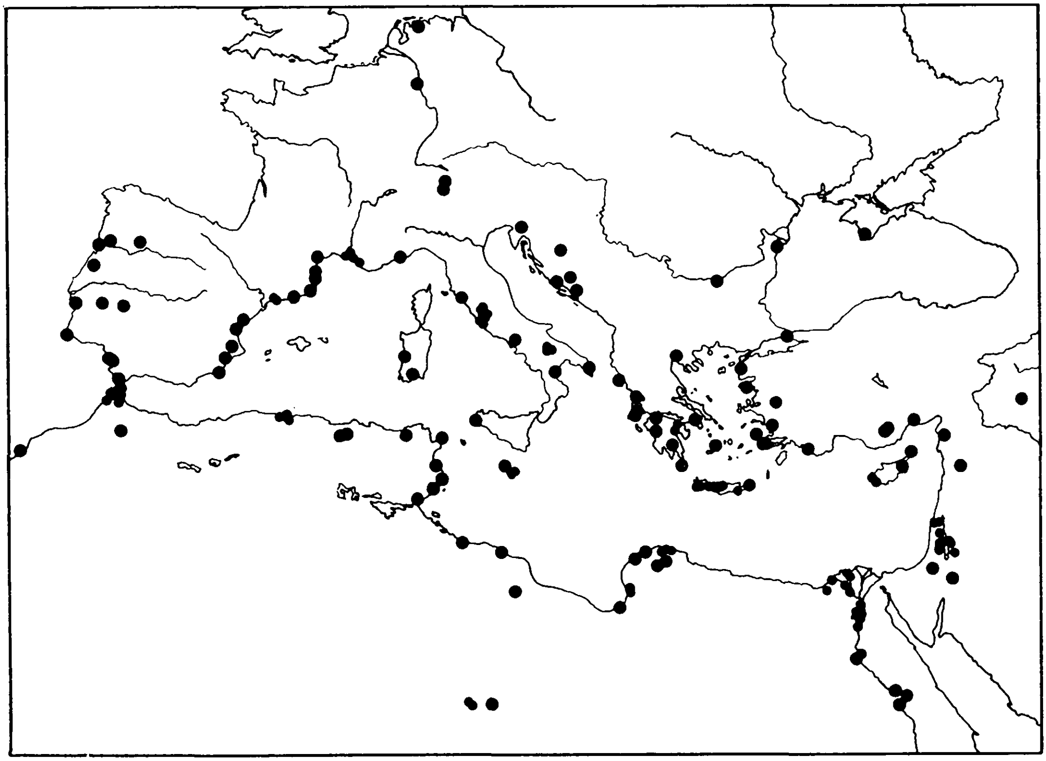
MAP 5 African R.S. Ware, casseroles, Form 23, and unslipped series, Forms 191–200
Mainly second to first half of third century



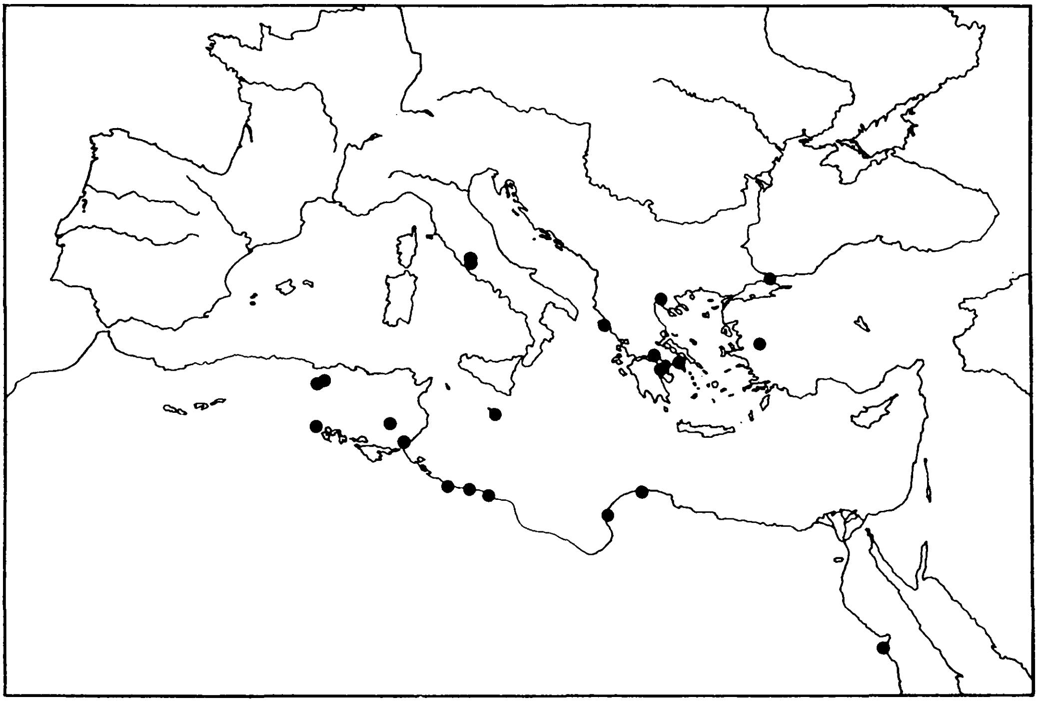
MAP 6 African R.S. Ware, Forms 48–50 Mid third to early fourth century



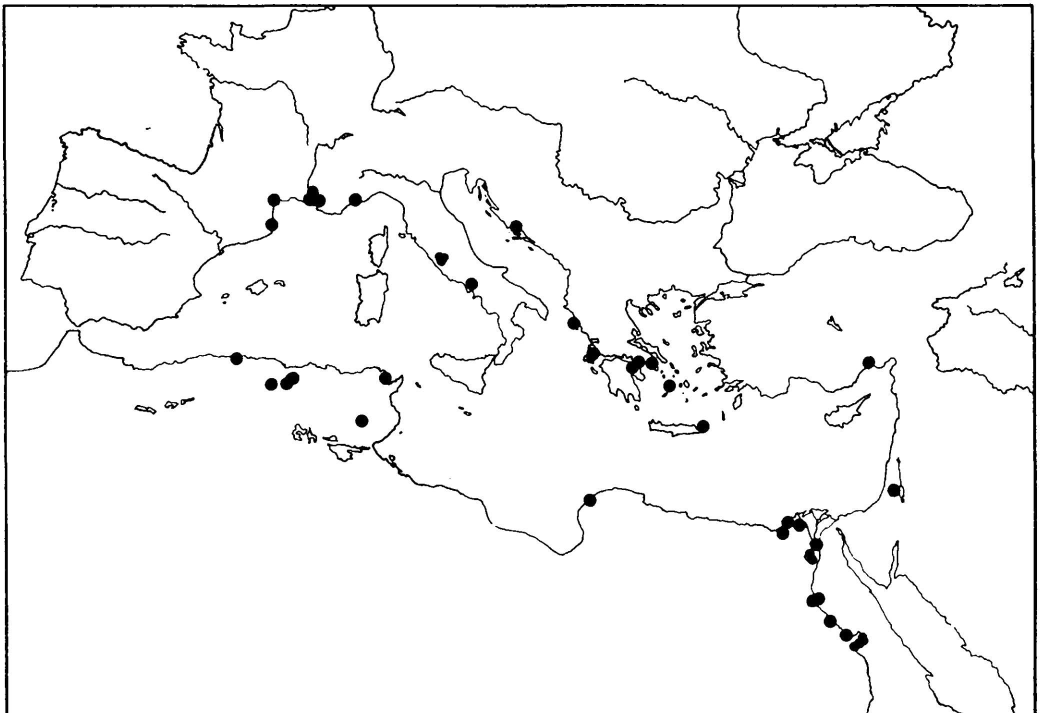
MAP 7 African R.S. Ware, appliqué and relief, late style Fourth to early fifth century



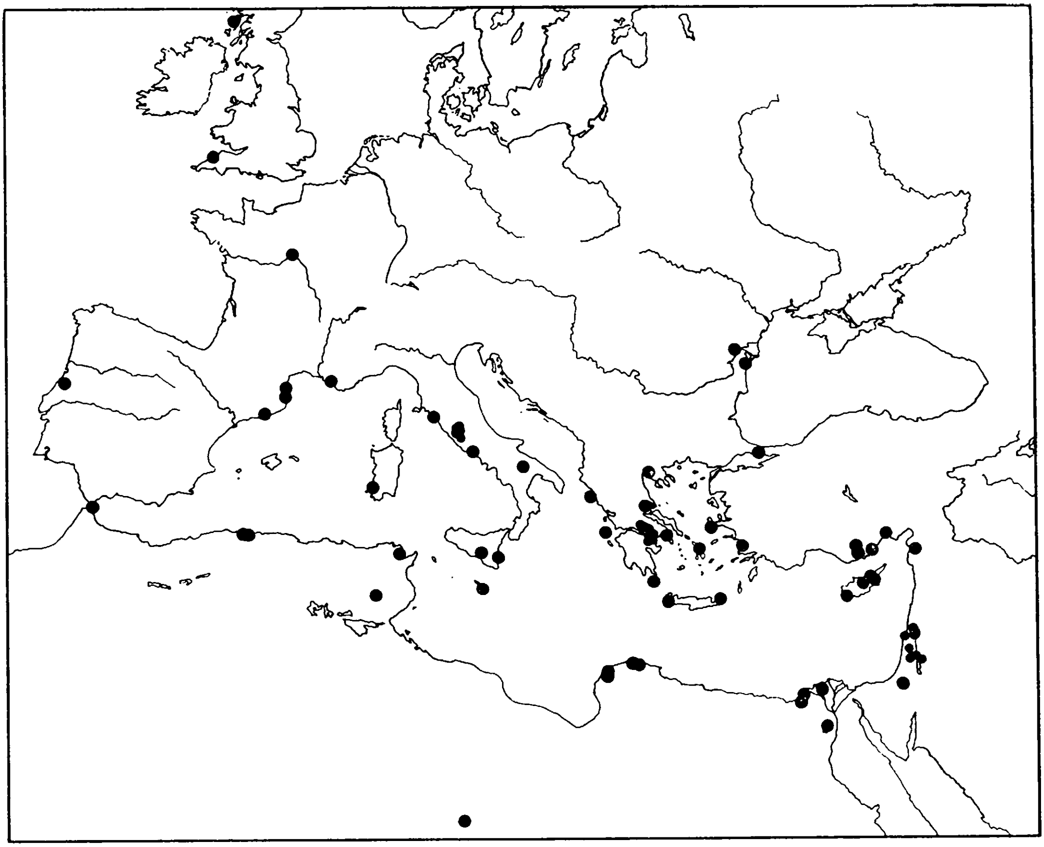
MAP 8 African R.S. Ware, stamp style A and associated forms Mid fourth to mid fifth century



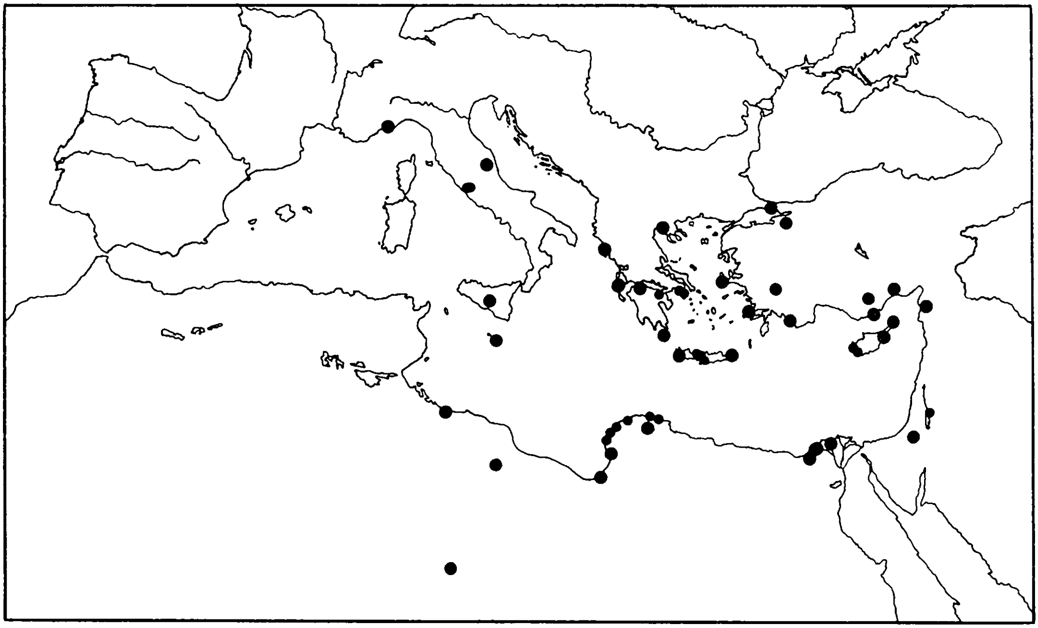
MAP 9 African R.S. Ware, stamp style B and associated forms Late fourth to early fifth century



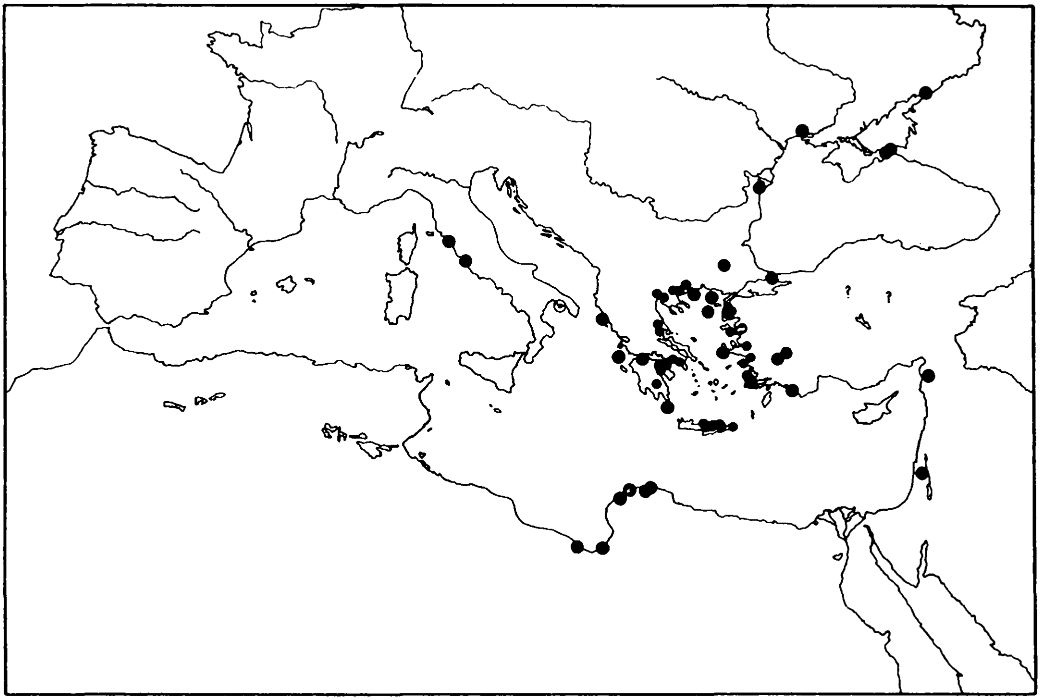
MAP 10 African R.S. Ware, stamp style D, Forms 82–85 *c.* A.D. 440–500 +



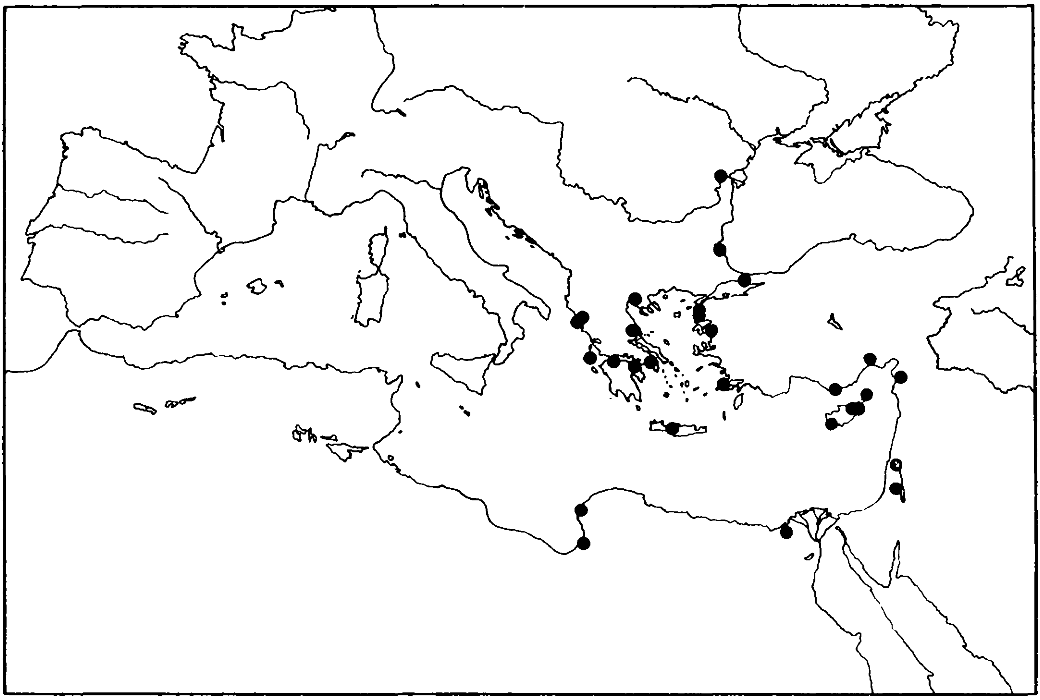
MAP 11 African R.S. Ware, Forms 103–104 Sixth century



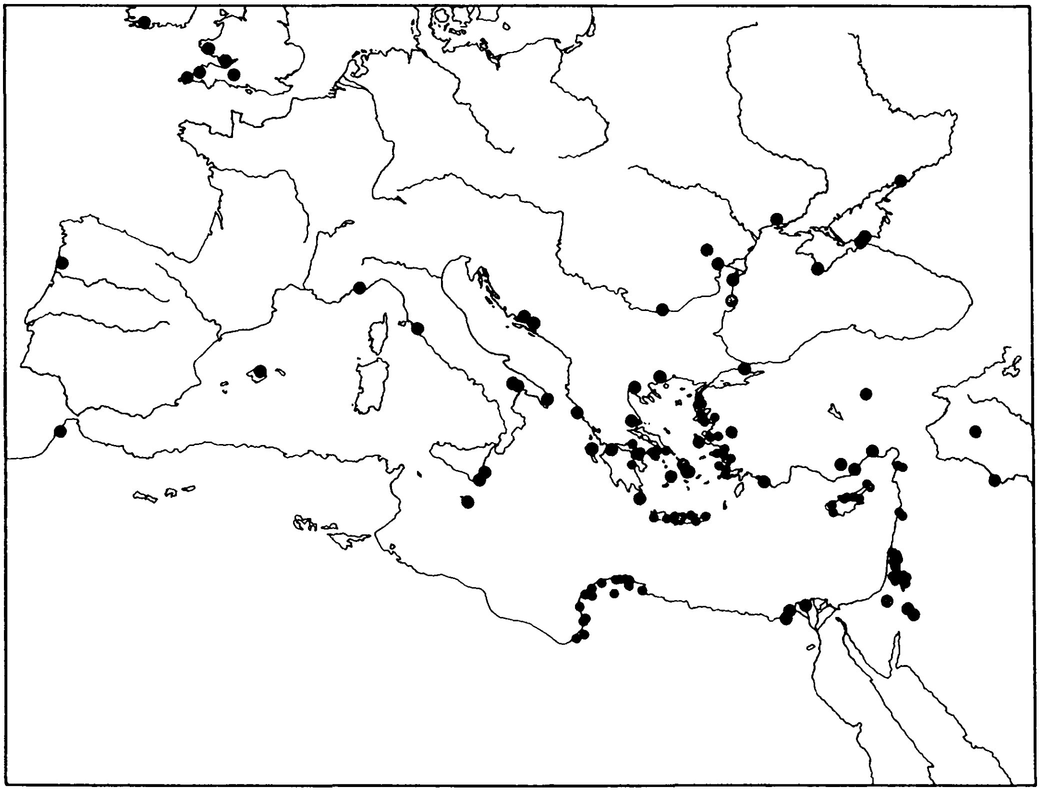
MAP 12 African R.S. Ware, Forms 105–106 End sixth to mid seventh century



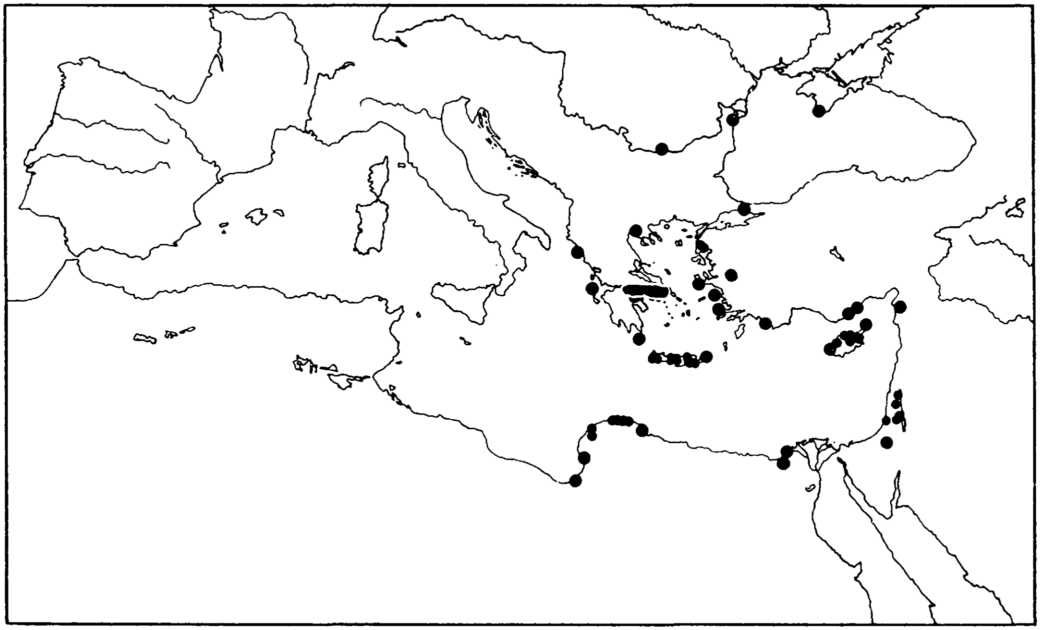
MAP 13 Çandarli Ware, late forms Mid second to mid third century



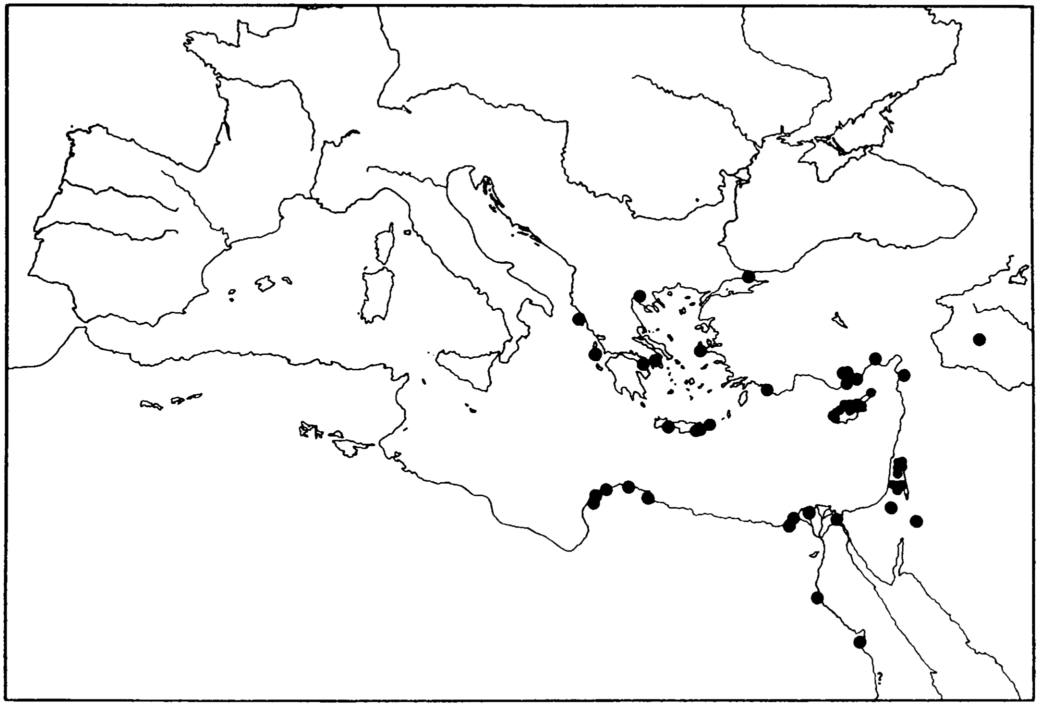
MAP 14 'Late Roman C' Ware, Forms 1–2 Late fourth to early fifth century



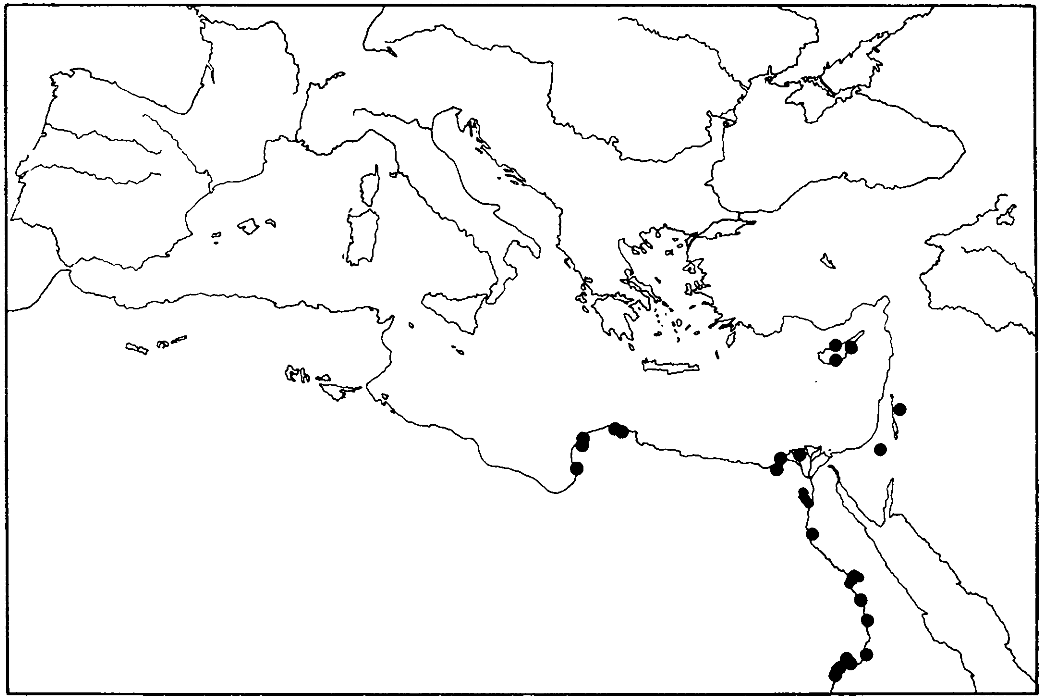
MAP 15 'Late Roman C' Ware, Form 3 Mid fifth to mid sixth century



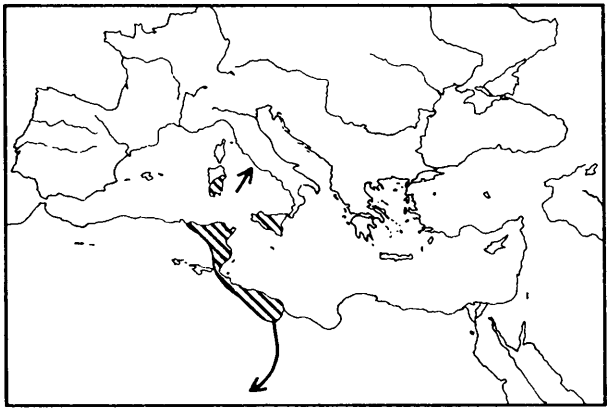
MAP 16 'Late Roman C' Ware, Form 9 Late sixth to mid seventh century



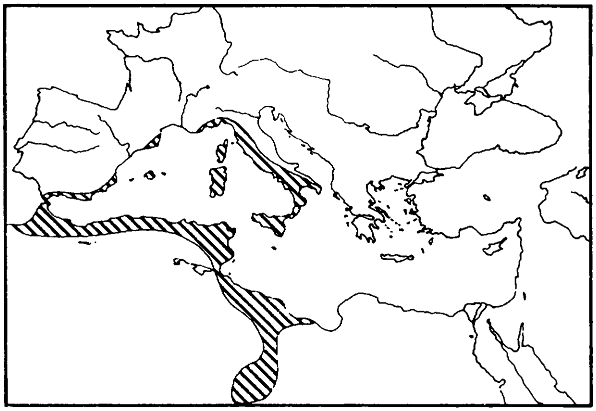
MAP 17 Cypriot R.S. Ware, all forms



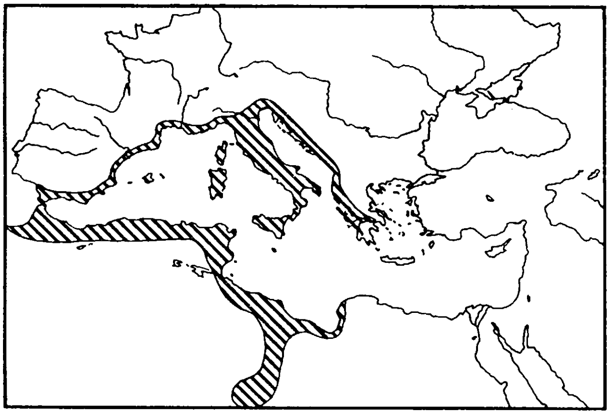
MAP 18 Egyptian R.S. 'A' Ware, all forms



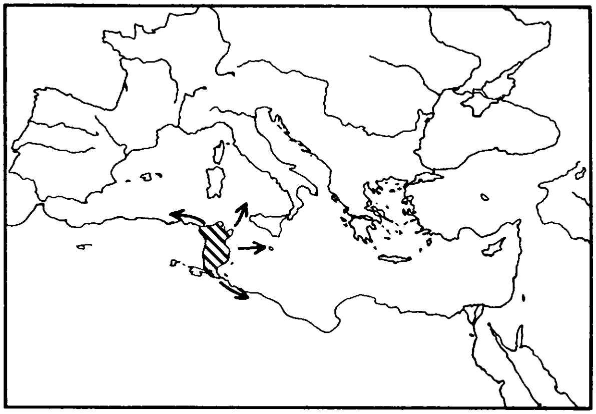
MAP 19 African R.S. Ware, earliest, Forms 1, 2, 3, 151, 161A *c.* A.D. 60–90



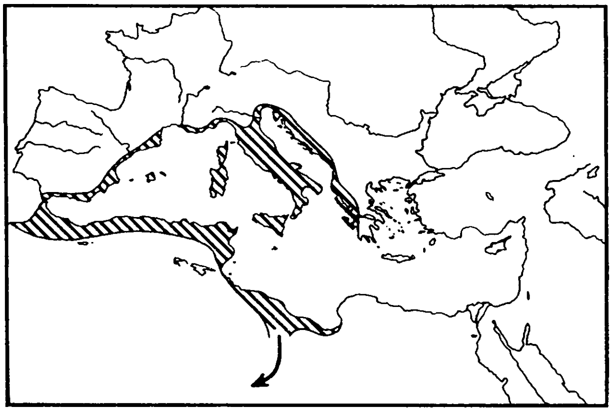
MAP 20 African R.S. Ware, Forms 3B–C, 4A, 5A, 6A About early second century



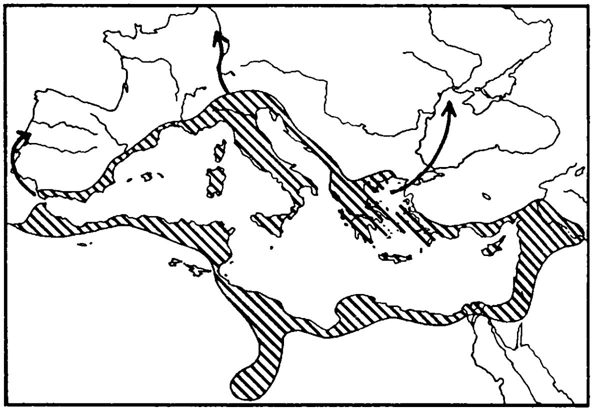
MAP 21 African R.S. Ware, Forms 8A, 9A Second century



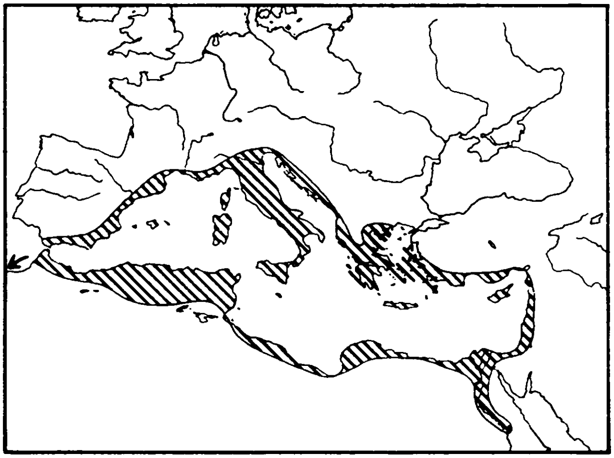
MAP 22 African R.S. Ware, closed forms Including appliqué



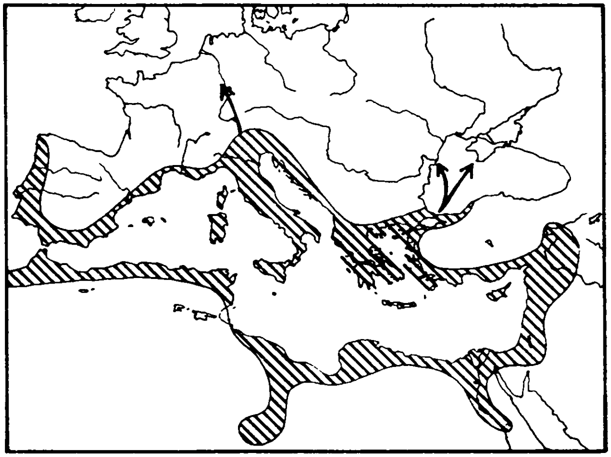
MAP 23 African R.S. Ware, casseroles, Form 23, and unslipped series, Forms 191–200 Mainly second to first half of third century



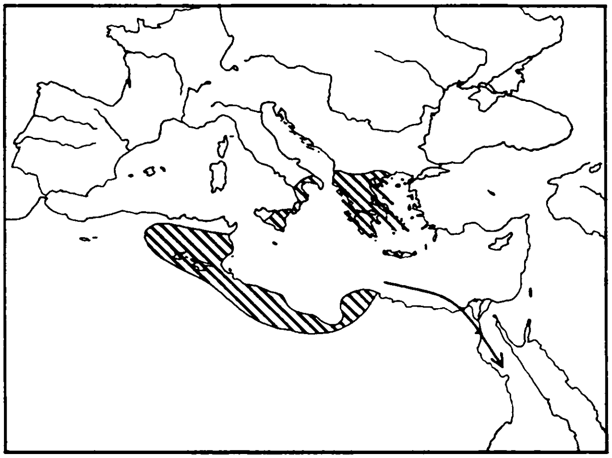
MAP 24 African R.S. Ware, Forms 48–50 Mid third to early fourth century



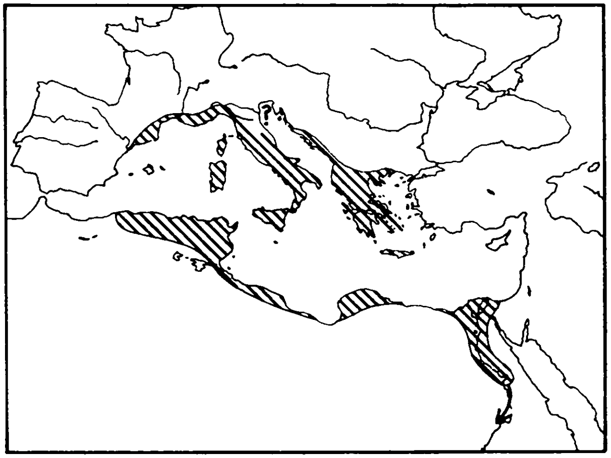
MAP 25 African R.S. Ware, appliqué and relief, late style Fourth to early fifth century



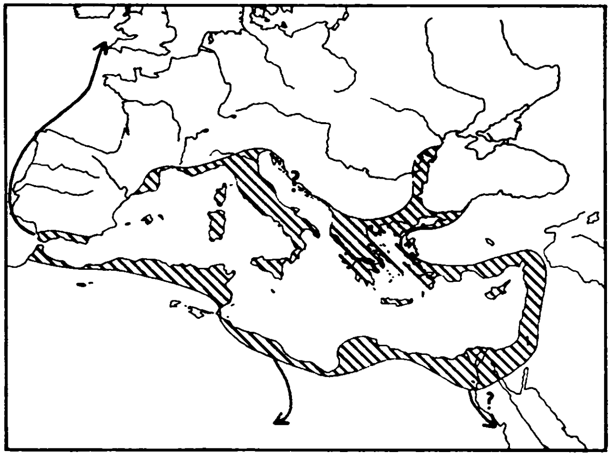
MAP 26 African R.S. Ware, stamp style A and associated forms Mid fourth to mid fifth century



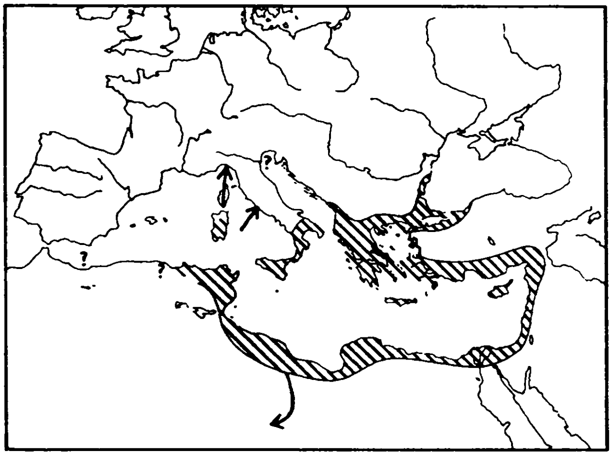
MAP 27 African R.S. Ware, stamp style B and associated forms Late fourth to early fifth century



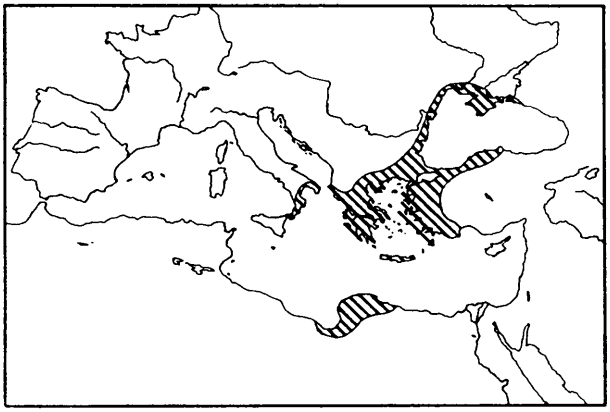
MAP 28 African R.S. Ware, stamp style D, Forms 82–85 *c.* A.D. 440–500 +



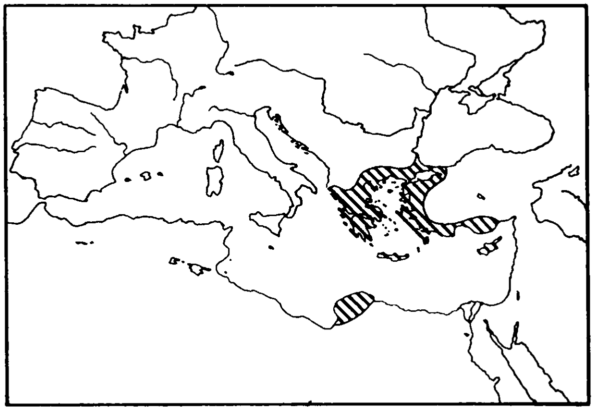
MAP 29 African R.S. Ware, Forms 103–104 Sixth century



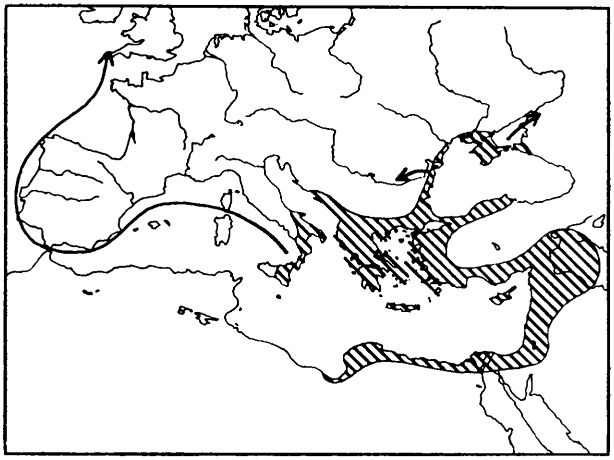
MAP 30 African R.S. Ware, Forms 105–106 End sixth to mid seventh century



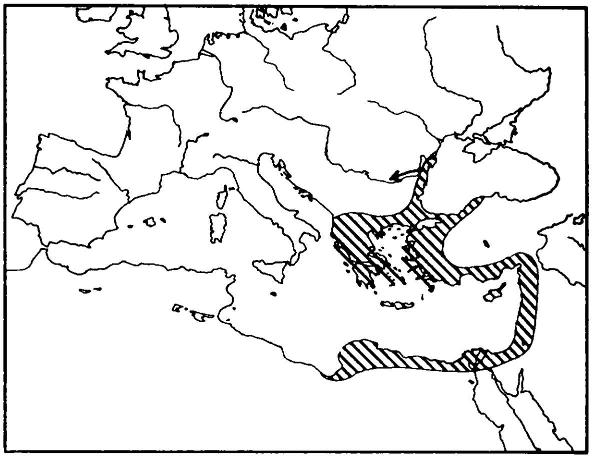
MAP 31 Çandarli Ware, late forms
Mid second to mid third century



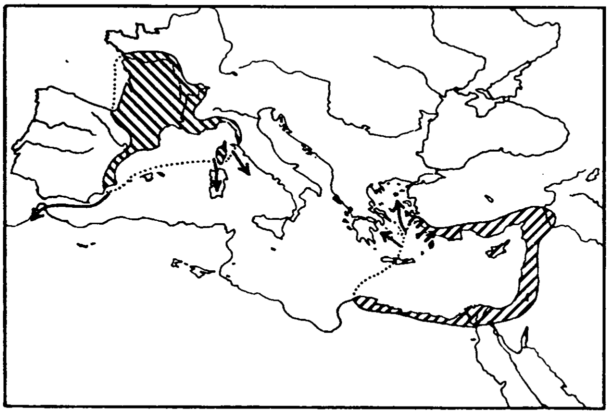
MAP 32 'Late Roman C' Ware, Forms 1–2
Late fourth to early fifth century



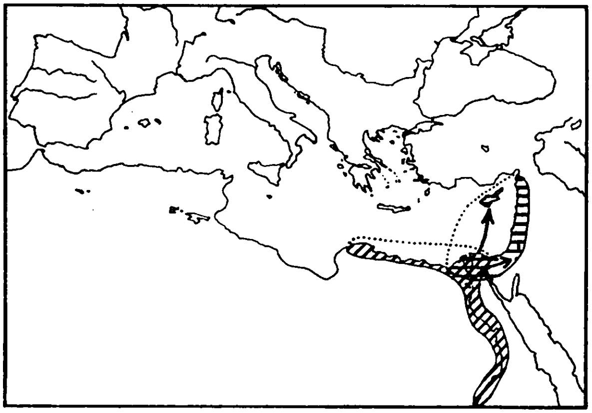
MAP 33 'Late Roman C' Ware, Form 3
Mid fifth to mid sixth century



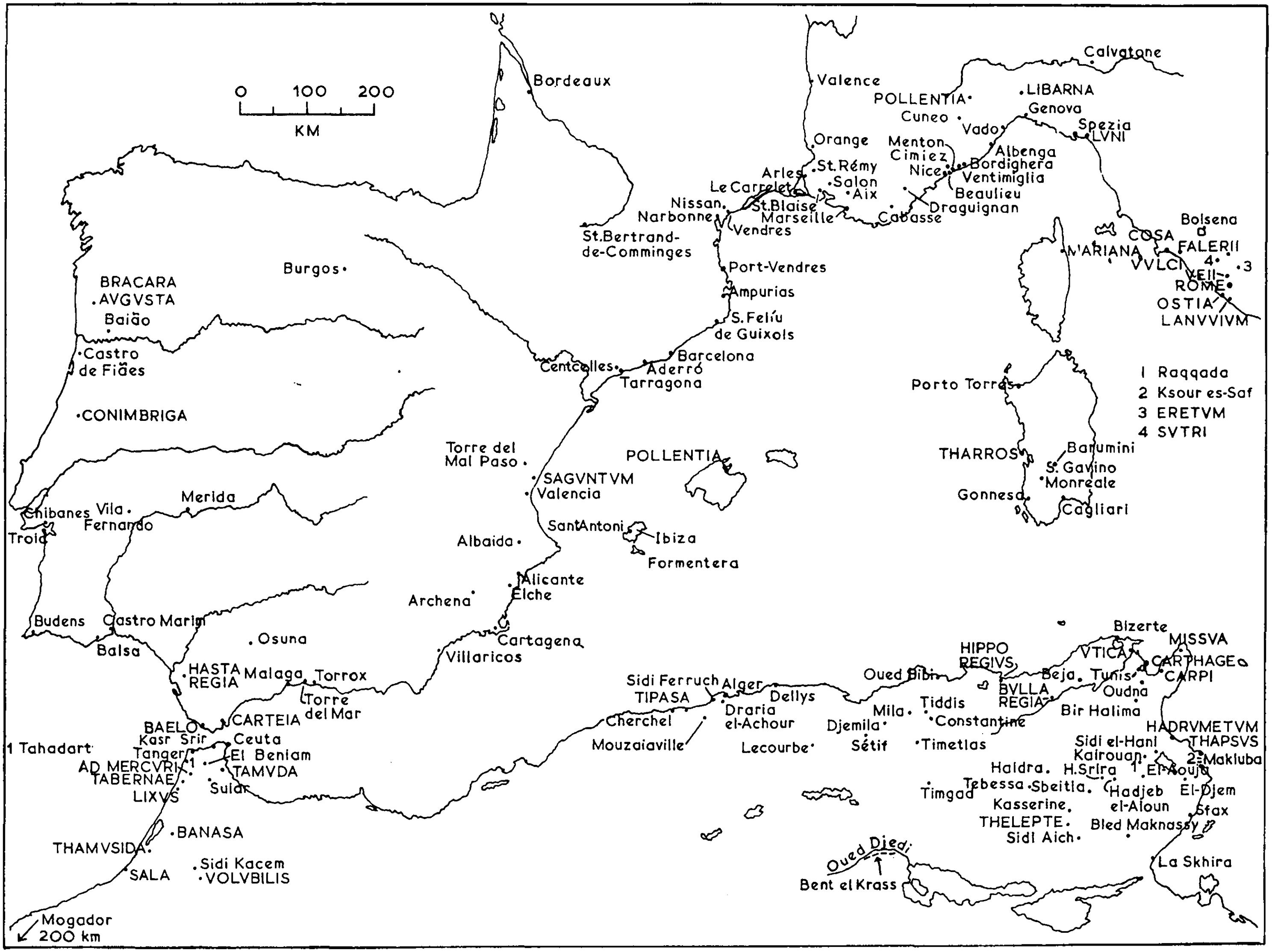
MAP 34 'Late Roman C' Ware, Form 9
Late sixth to mid seventh century



MAP 35 Gaulish 'T.S. grise' (left) and Cypriot
R.S. Ware (right)



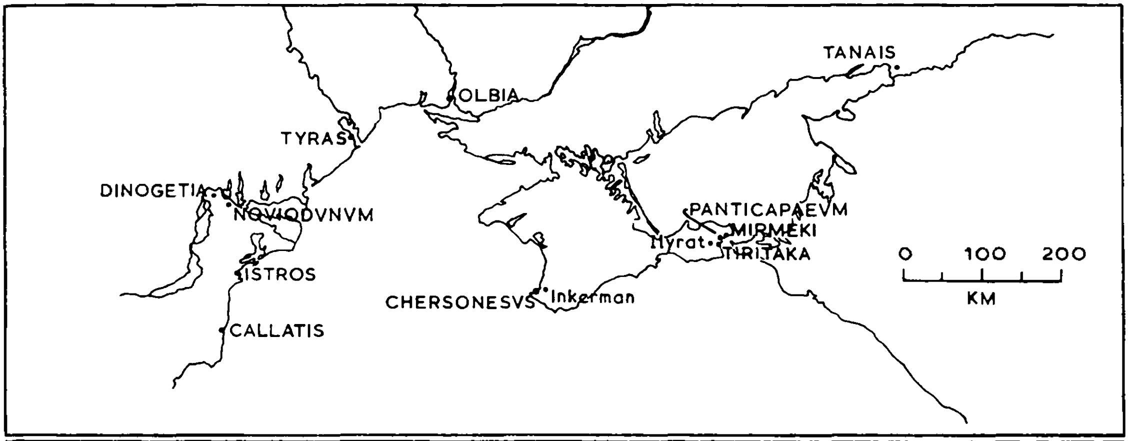
MAP 36 Egyptian R.S. Ware, 'A' (diagonal hatching)
and 'C' (horizontal lines)

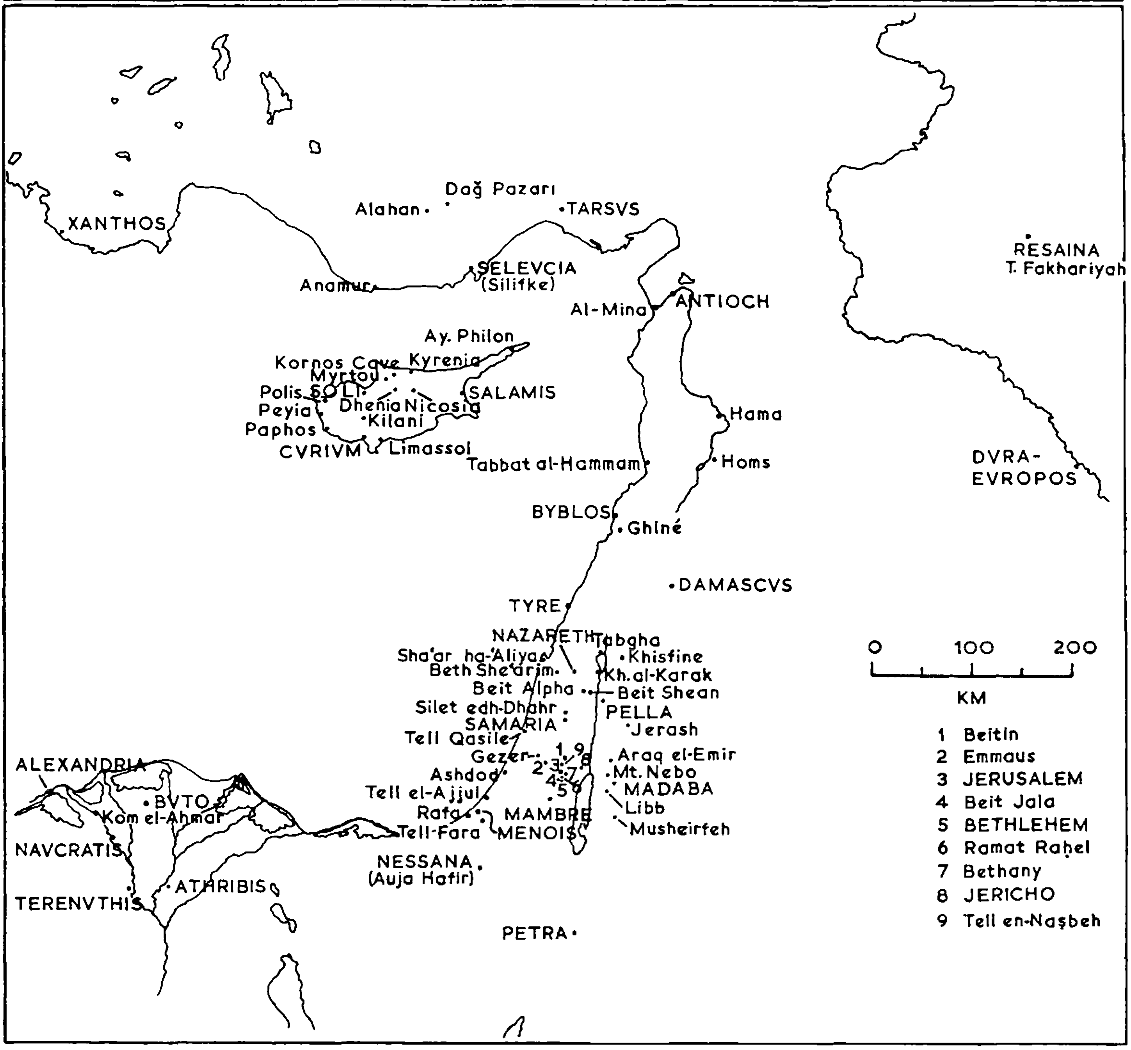

0 100 200
KM
Bordeaux
Valence
Calvatone
POLLENTIA
LIBARNA
Genova
Cuneo
Vado
Spezia
LVNI
Orange
Menton
Cimiez
Nice
Albenga
Bordighera
Ventimiglia
Beaulieu
Draguignan
Arles
St.Rémy
Salon
Aix
Le Carrelet
Nissan
St.Blaise
Narbonne
Marseille
Cabasse
Vendres
St.Bertrand-
de-Comminges
Port-Vendres
Ampurias
S.Felíu
de Guixols
Barcelona
Aderró
Centcelles
Tarragona
Burgos
BRACARA
AVGVSTA
Baião
Castro
de Fiães
CONIMBRIGA
Torre del
Mal Paso
SAGVNTVM
Valencia
POLLENTIA
SantAntoni
Ibiza
Formentera
Albaida
Alicante
Elche
Archena
Cartagena
Villaricos
Merida
Chibanes
Vila
Fernando
Troia
Budens
Castro Marim
Balsa
Osuna
HASTA
REGIA
Malaga
Torrox
Torre
del Mar
BAELO
CARTEIA
Kasr Srir
Ceuta
Tanger
El Beniam
TAMVDA
1 Tahadart
AD MERCVRI
TABERNAE
LIXVS
Suiar
BANASA
THAMVSIDA
SALA
Sidi Kacem
VOLVBILIS
Mogador
200 km
Bolsena
COSA
MARIANA
FALERII
VVLCI
VEII
ROME
OSTIA
LANVVIVM
1 Raqqada
2 Ksour es-Saf
3 ERETVM
4 SVTRI
Porto Torres
THARROS
Barumini
S. Gavino
Monreale
Gonnesa
Cagliari
Bizerte
MISSVA
VTICA
CARTHAGE
CARPI
HIPPO
REGIVS
Beja
Tunis
Oudna
BVLLA
REGIA
Bir Halima
Oued Bibi
Sidi Ferruch
Alger
TIPASA
Dellys
Draria
el-Achour
Cherchel
Mouzaiaville
Lecourbe
Mila
Tiddis
Constantine
Djemila
Sétif
Timetlas
HADRVMETVM
THAPSVS
Sidi el-Hani
Kairouan
Makluba
Haidra
H.Srira
El-Aouja
Timgad
Tebessa
Sbeitla
Hadjeb
el-Aioun
El-Djem
Kasserine
Sfax
THELEPTE
Bled Maknassy
Sidi Aich
Oued Djedi
Bent el Krass
La Skhira

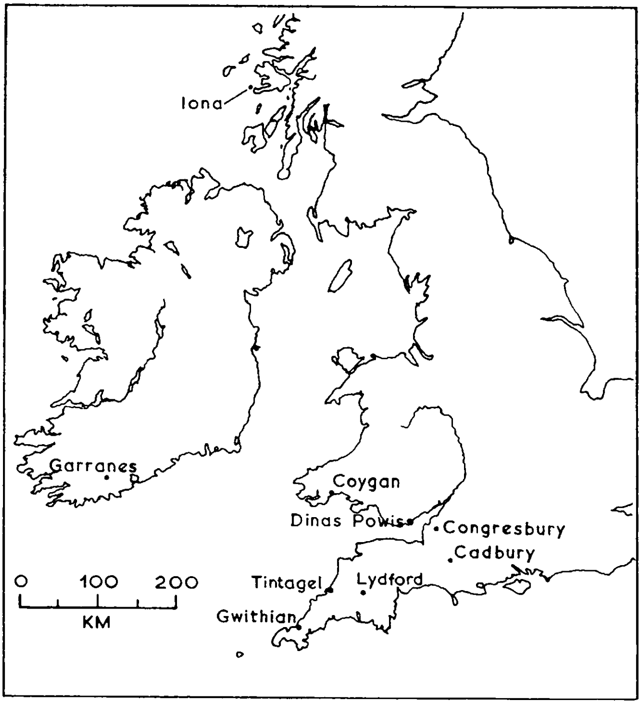
MAP 37

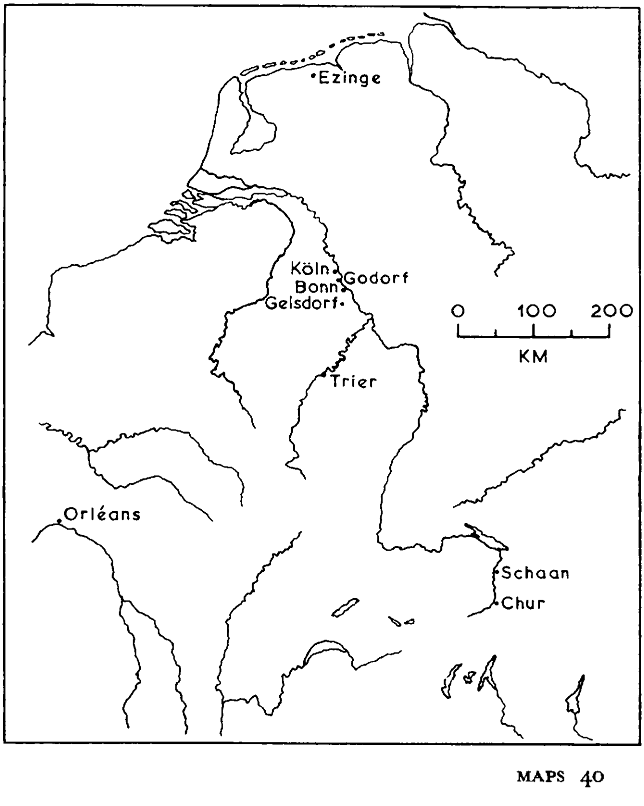
AGVNTVM
VIRINVM
AQVILEIA
Predjama
Trieste
Prijedor
ARGYRVNTVM
Šipovo
Bugojno
Duvno
Split
SALONA
Lisičići
Višići
Ascoli Piceno
ROME
Torre Iacova
ARICIA
LANVVIVM
Sperlonga
Francolise
Venosa
Spinazzola
EGNATIA
Ischia
POMPEII
T. Annunziata
Altamura
Taranto
T. Sgarrata
Cento Porte
Castrovillari
SYBARIS
Panarea
Lipari
Pianopoli
MOTYA
Tusa
LILYBAEVM
Barrafranca
Catania
Sofiana
Piazza Armerina
Sortino
SYRACUSE
Còmiso
Floridia
Eloro
Caucana
Marzameni
S.Paolo Milqi
R.il-Wardija
Hamrun, Valletta
Rabat
Zejtun
Siggiewi
Tas Silg
Qrendi
Birzebbugia
Ta' Gawhar
DOCLEA
PHOINIKE
Butrinto
Corfu
Nea Anchialos
NICOPOLIS
Ithaki
Sami
OLYMPIA
THESSALONICA
(Saloniki)
Poiana
DINOGETIA
NOVIODVNVM
ISTROS
CALLATIS
SVCIDAVA
NOVAE
APOLLONIA
Svilengrad
CONSTANTINOPLE
(Istanbul)
PHILIPPI
THASOS
SAMOTHRACE
Iznik
60 km.
Çanakkale
TROY
Ezine
LEMNOS
Volos
Gorítsa
METHYMNA
MYTILENE
PERGAMON
Çandarli
İzmir
SARDIS
HALAE
CLAZOMENAE
DELPHI
MEDEON
Emporio
EPHESVS
ELEUSIS
ATHENS
SAMOS
Patras
Porto Rafti
PRIENE
CORINTH
MILETVS
KENCHREAI
LABRANDA
IASOS
ARGOS
DELOS
Bodrum
LEROS
SPARTA
SIPHNOS
NAXOS
KOS
KNIDOS
RHODES
THERA
KYTHERA
KARPATHOS
Iraklion
KNOSSOS
ITANOS
GORTYNA
Ierapetra
1 LECHAION
2 ISTHMIA
3 Vari cave
4 TRALLES
5 APHRODISIAS
6 Ragusa
0 100 200
KM
Tripoli
SABRATHA
Tajura
LEPCIS MAGNA
Mdeina Doga
Wadi el-Amud
Ghirza
Bu Ngem
M. Sultan
Wadis:
1 W. Sofeggin
2 W. Bei el-Kebir
3 W. Neina
Ghat 480 km
Germa 320 km
Sebha 270 km
Haddadia
Garanigh
BOREVM
AVTOMALAX
Heneia
G.Atallat
APOLLONIA
Sidi Aamer
Ras el-Hilal
PHYCVS
Latrun
Tolmeita
CYRENE
Lamluda
Tocra
Beni Gdem
BOMBA
Tan Soluch
G.Usciscc
G.Maragh
Benghazi
G.Tecasis
Tika
G.Bu Msceili
G.Chel
G.Atresc
G.Trab
1 Alba
2 Marazigh
3 Bu Hasan
4 G.Remteiat

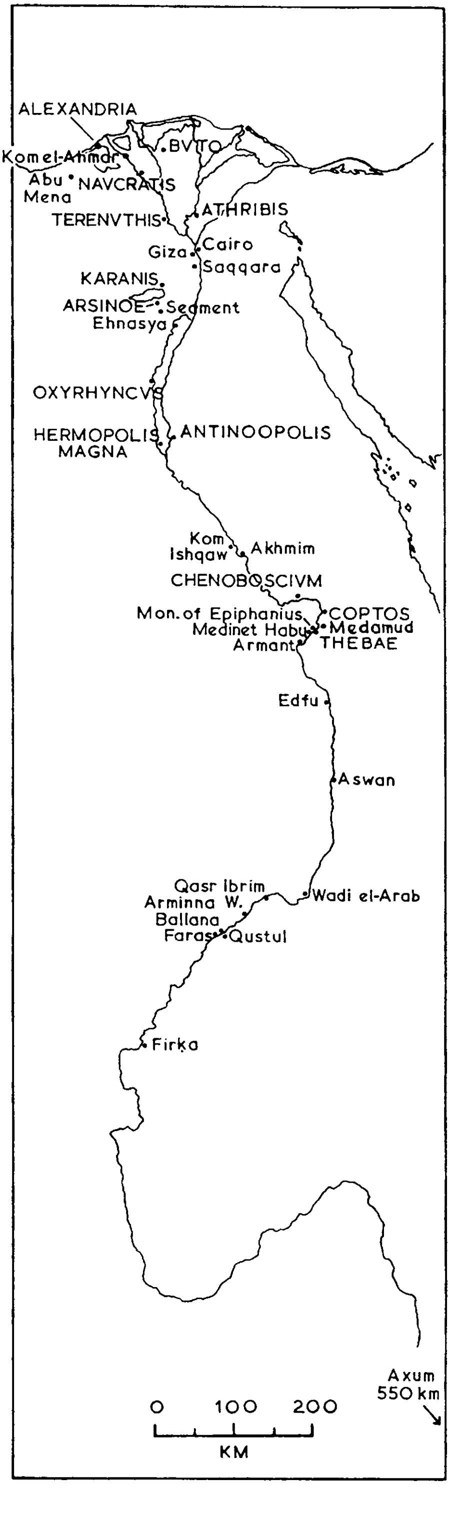
MAPS 38


TANAIS
OLBIA
TYRAS
DINOGETIA
NOVIODVNVM
ISTROS
CALLATIS
CHERSONESVS
Inkerman
PANTICAPAEVM
MIRMEKI
Hyrat
TIRITAKA
0 100 200
KM


Dağ Pazarı
Alahan
TARSVS
XANTHOS
RESAINA
T. Fakhariyah
SELEVCIA
(Silifke)
Anamur
Al-Mina
ANTIOCH
Ay. Philon
Kornos Cave
Kyrenia
Myrtou
Polis
SOLI
SALAMIS
Peyia
Dhenia
Nicosia
Kilani
Paphos
CVRIVM
Limassol
Tabbat al-Hammam
Hama
Homs
DVRA-
EVROPOS
BYBLOS
Ghiné
DAMASCVS
TYRE
NAZARETH
Tabgha
Sha'ar ha-'Aliya
Khisfine
Beth She'arim
Kh. al-Karak
Beit Alpha
Beit Shean
Silet edh-Dhahr
PELLA
SAMARIA
Jerash
Tell Qasile
Gezer
Araq el-Emir
Ashdod
Mt. Nebo
Tell el-Ajjul
MADABA
Rafa
MAMBRE
Libb
Tell-Fara
MENOIS
Musheirfeh
ALEXANDRIA
BVTO
Kom el-Ahmar
NAVCRATIS
ATHRIBIS
TERENVTHIS
NESSANA
(Auja Hafir)
PETRA
0 100 200
KM
1 Beitin
2 Emmaus
3 JERUSALEM
4 Beit Jala
5 BETHLEHEM
6 Ramat Raḥel
7 Bethany
8 JERICHO
9 Tell en-Naṣbeh


Iona
Garranes
Coygan
Dinas Powis
Congresbury
Cadbury
Tintagel
Lydford
Gwithian
0 100 200
KM


Ezinge
Köln
Godorf
Bonn
Gelsdorf
0 100 200
KM
Trier
Orléans
Schaan
Chur

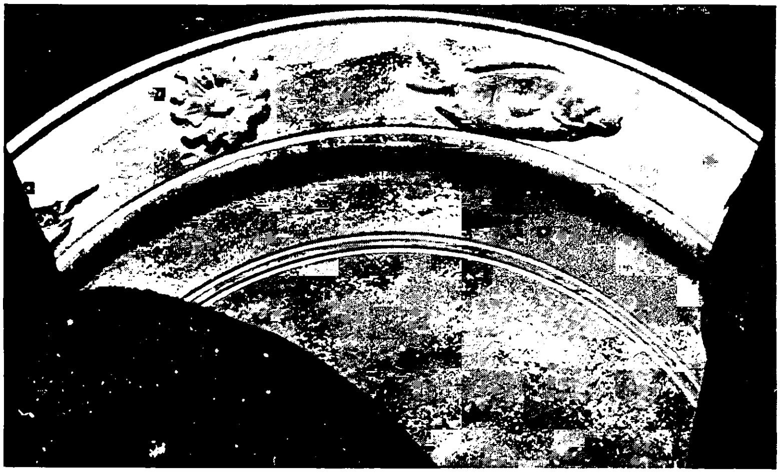

ALEXANDRIA
Kom el-Ahmar
BVTO
Abu Mena
NAVCRATIS
TERENVTHIS
ATHRIBIS
Giza
Cairo
Saqqara
KARANIS
ARSINOE
Sedment
Ehnasya
OXYRHYNCVS
HERMOPOLIS MAGNA
ANTINOOPOLIS
Kom Ishqaw
Akhmim
CHENOBOSCIVM
Mon. of Epiphanius
Medinet Habu
Armant
COPTOS
Medamud
THEBAE
Edfu
Aswan
Qasr Ibrim
Arminna W.
Ballana
Faras
Qustul
Wadi el-Arab
Firka
Axum 550 km
0 100 200
KM

MAPS 40

PLATES I-XXIII

a Form 3.3 Vienna IV 1318 D. 18·6 cm.

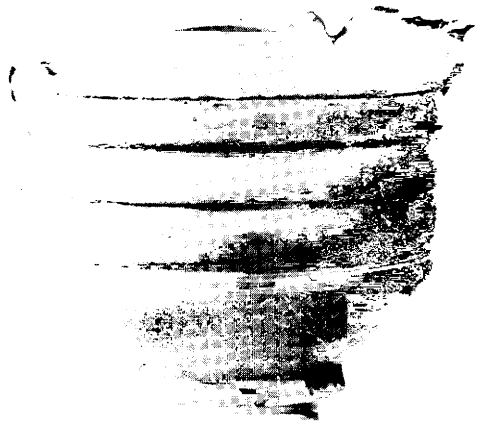
b Form 35.1 Louvre AO 6640 *bis* D. 7·8



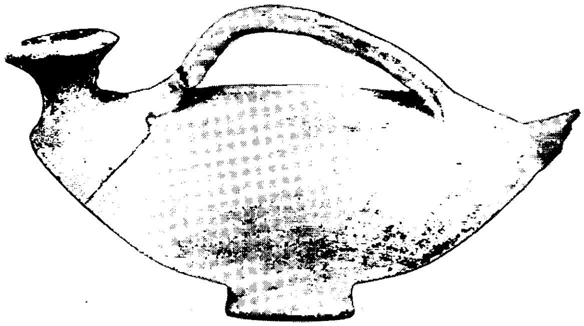
c Form 24.1 Ostia 4670 Scale 2 : 3

d Form 25.1 Ostia 4669 Scale 1 : 2

a Form 122.1 Leiden H& 10 max. H. 8·4

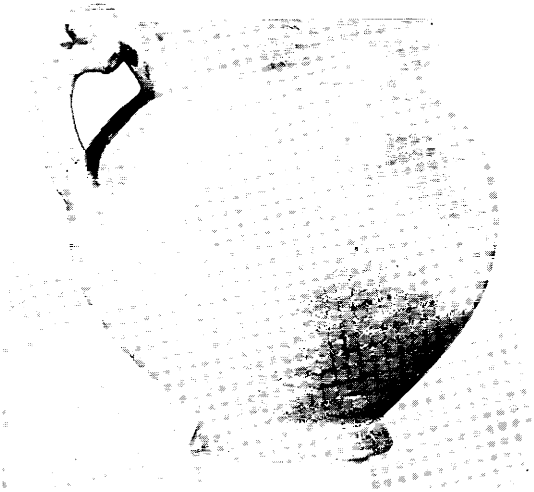


b Form 122.3 Leiden HL 1 max. H. 8·3



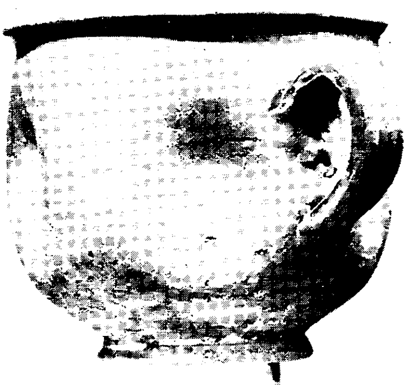
c Form 123.5 Toronto 926.50.10 L. 15·2

d Form 131.1 Leiden HP47 H. 9·2

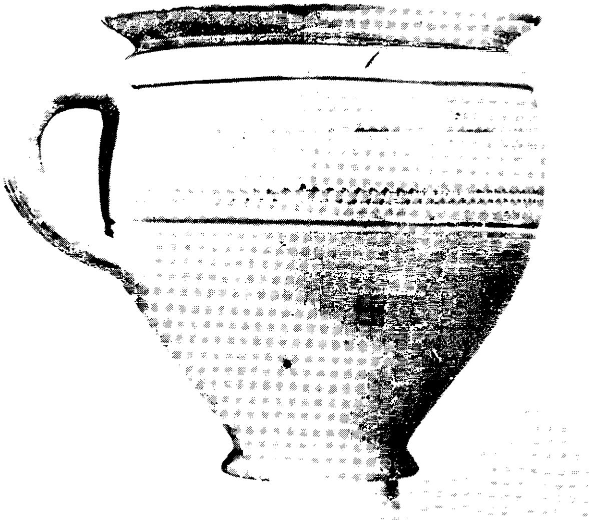


a Form 134.2 Leiden H II 27 H. *c.* 8·5

b Form 135.2 Leiden H III Z 44 H. *c.* 7·5

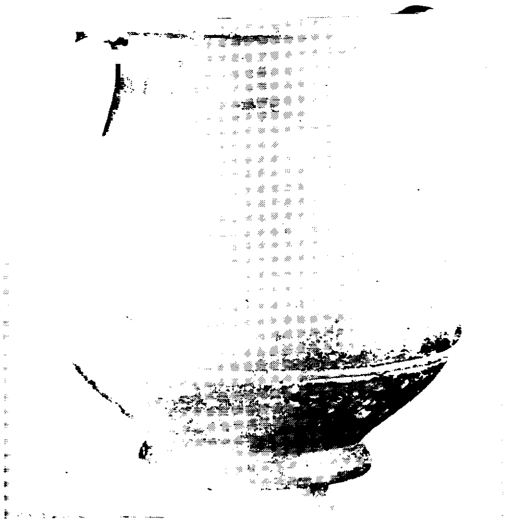


c Form 135.5 Leiden HMM 46 H. 7·2

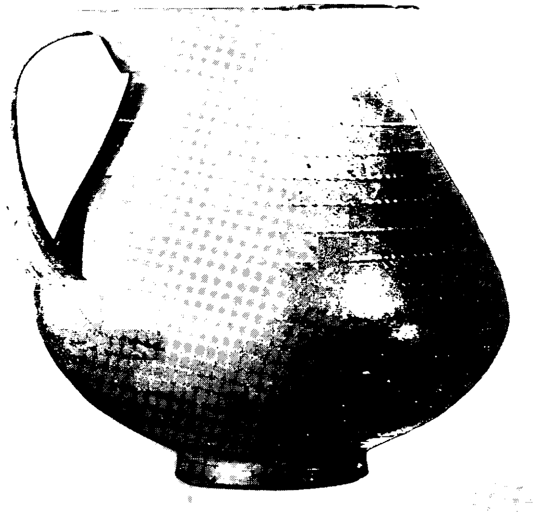


d Form 136.2 Leiden H III Z 45 H. 9·0

a Form 137.4 Leiden HP48 H. 9·4



b Form 137.6 Leiden HH26 H. 9·4

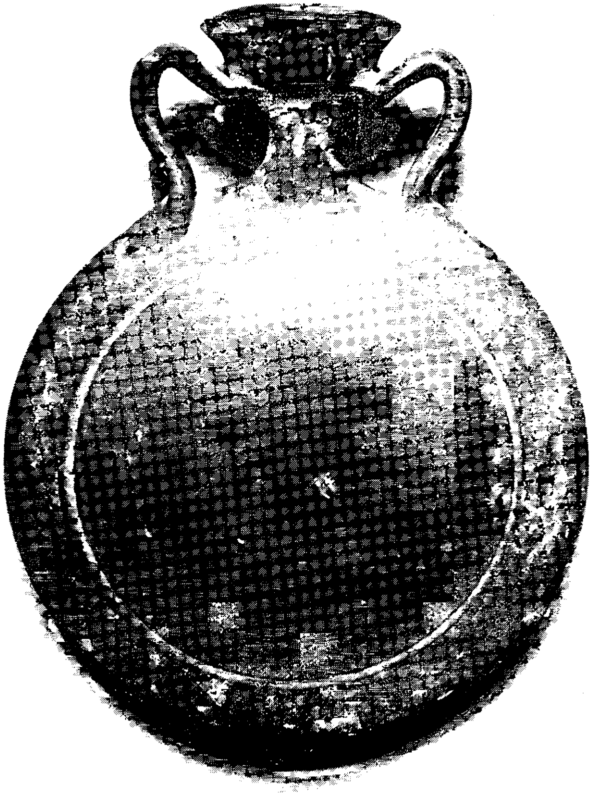


c Form 138.2 Leiden HA30 H. 9·3

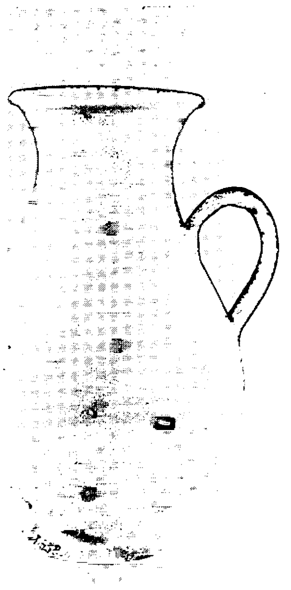
d Form 139.1 Leiden HA29 H. 11·4

a Form 140.3 Leiden HIIIZ46 H. 9·7

b Form 144.1 Leiden HNN174 H. 8·6

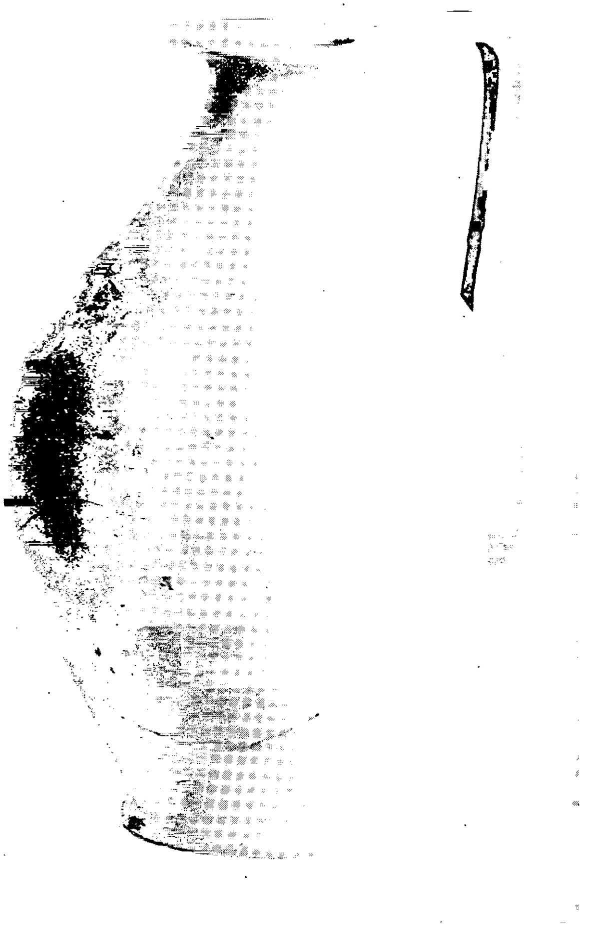


c Form 147.3 Hispanic Society of America E307 H. 17·9

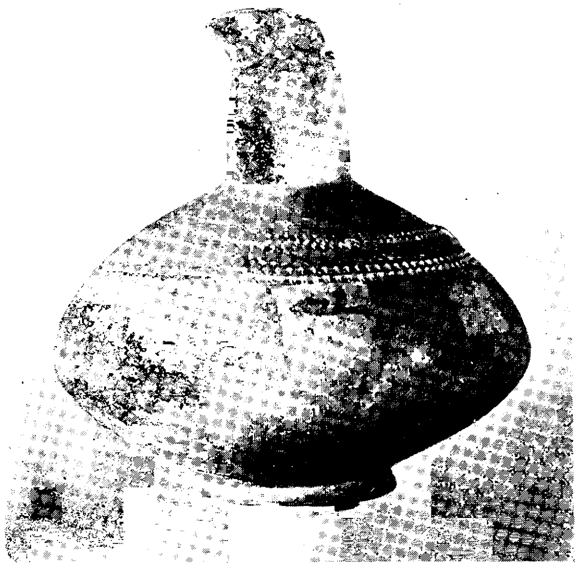


b Form 153.1 BM W.T. 558
H. 12·0

c Form 154.1 MMNY 17.194.864
H. 11·8

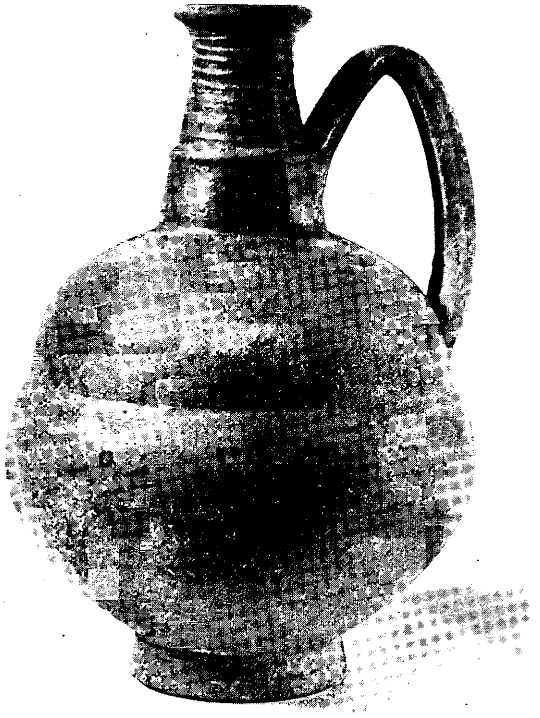


a Form 151.1 Fogg Art Museum CC321 H. 19·1



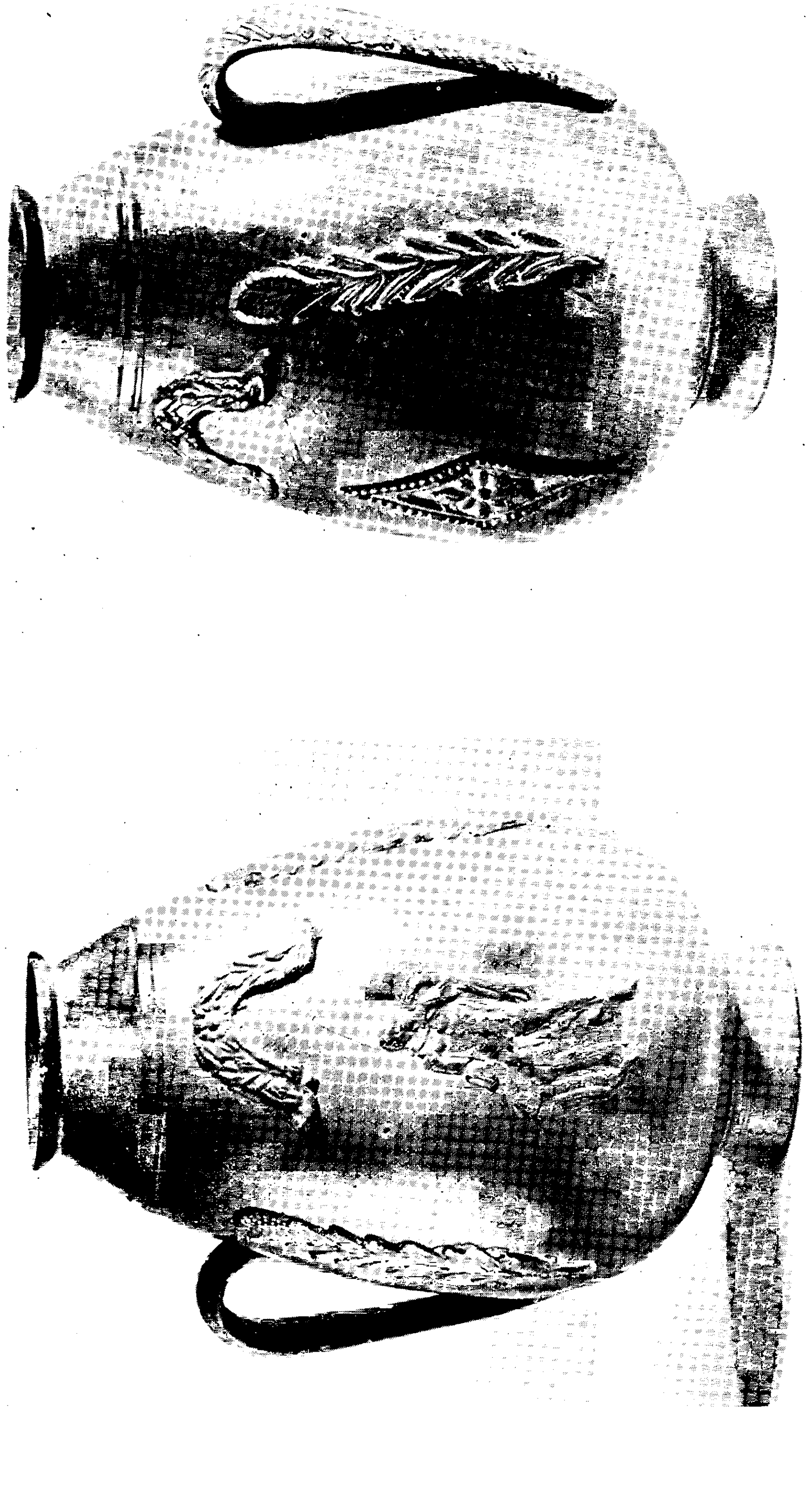
a Form 156.1 Leiden HA15 H. 12·1

b Form 158.6 Leiden HG12 H. 10·4

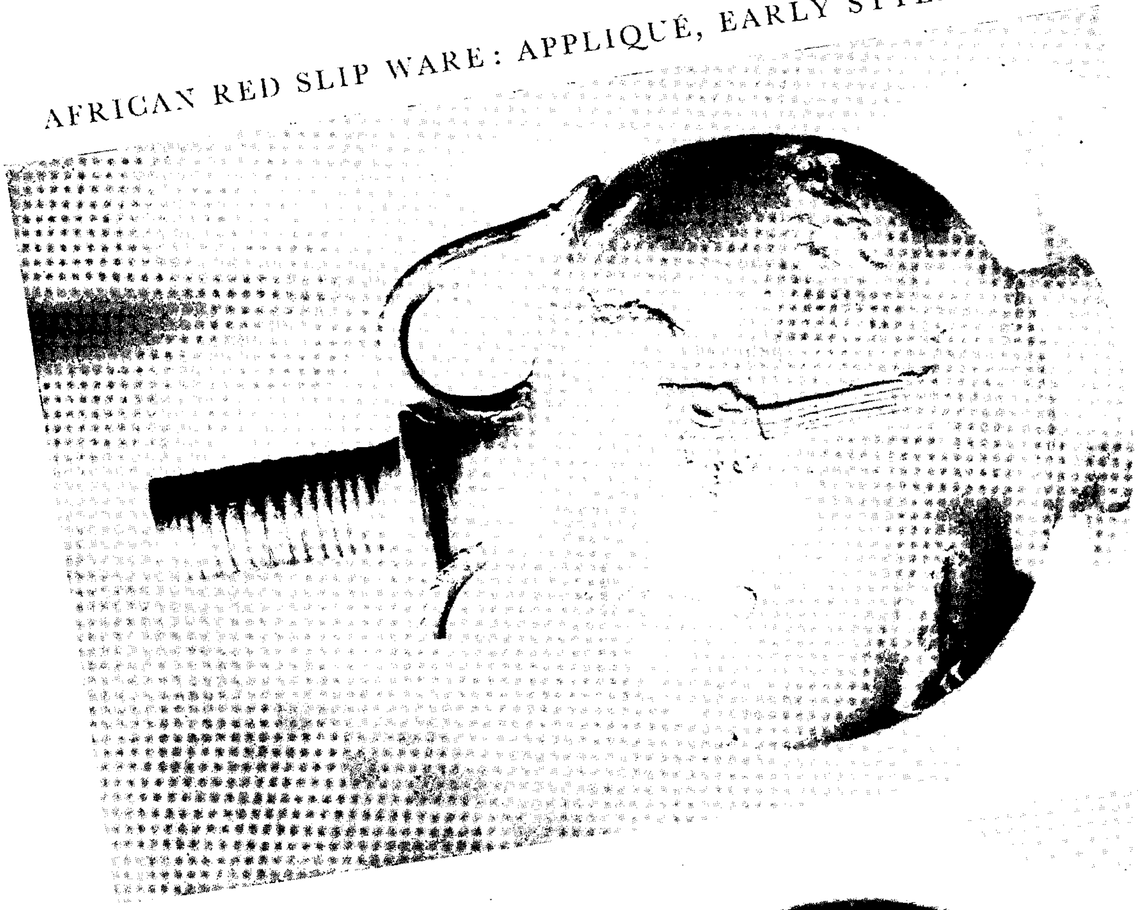


c Form 160.1 BM MSC. 2181 H. 16·8

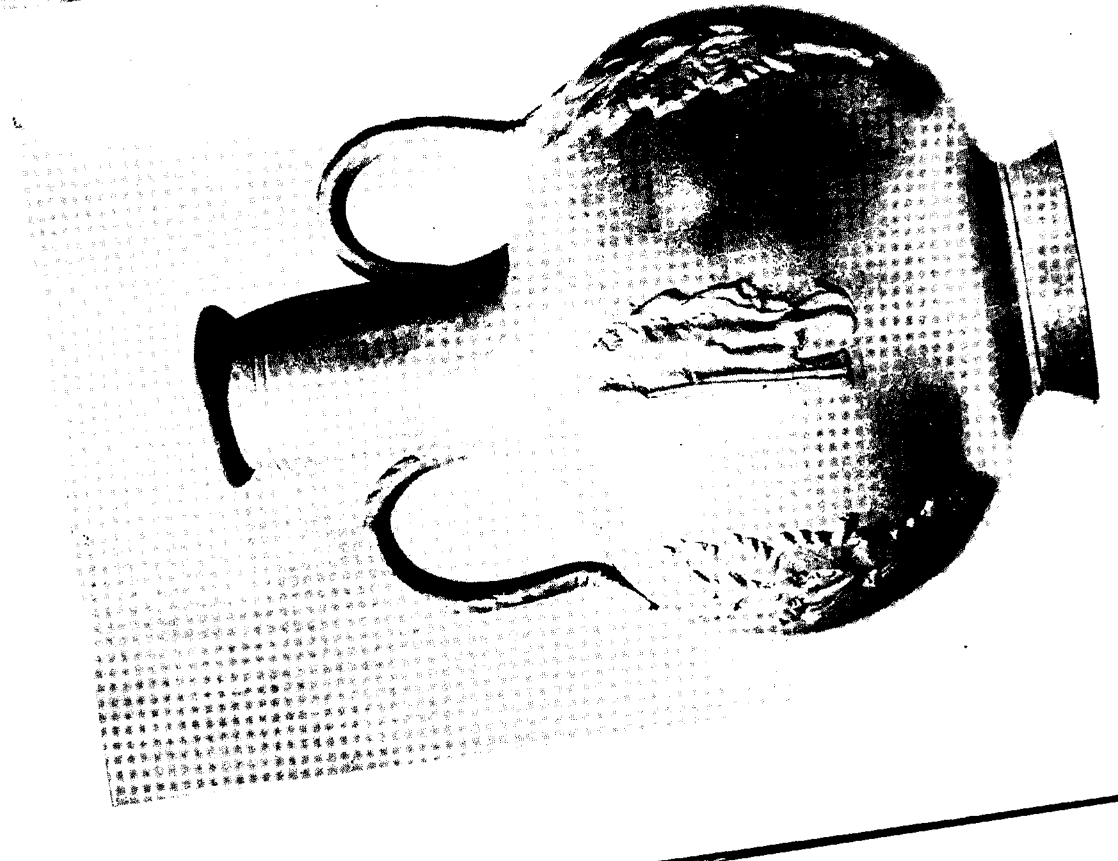
d Form 171.49 Leiden I 1924/2.12 H. 16·7



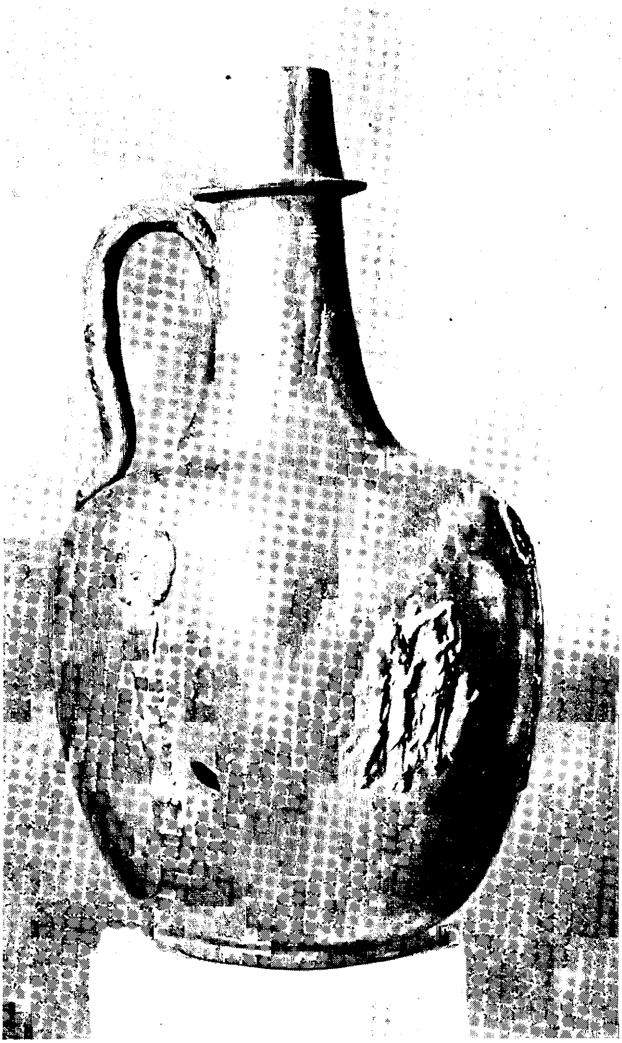
Form 171.39 Trier EV1943.22 H. 15.3



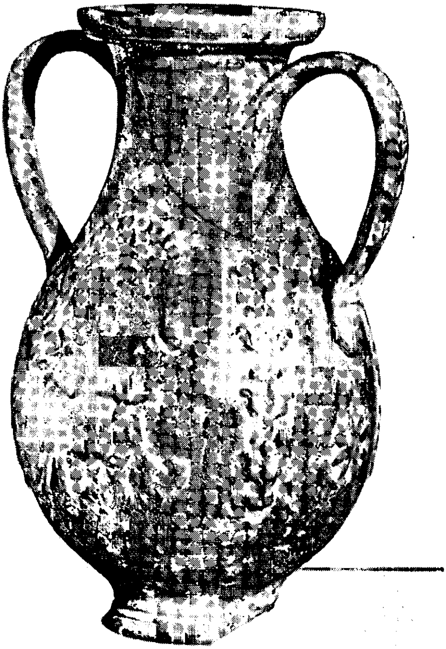
b Form 173.1 Louvre AO6617 H. 17·0



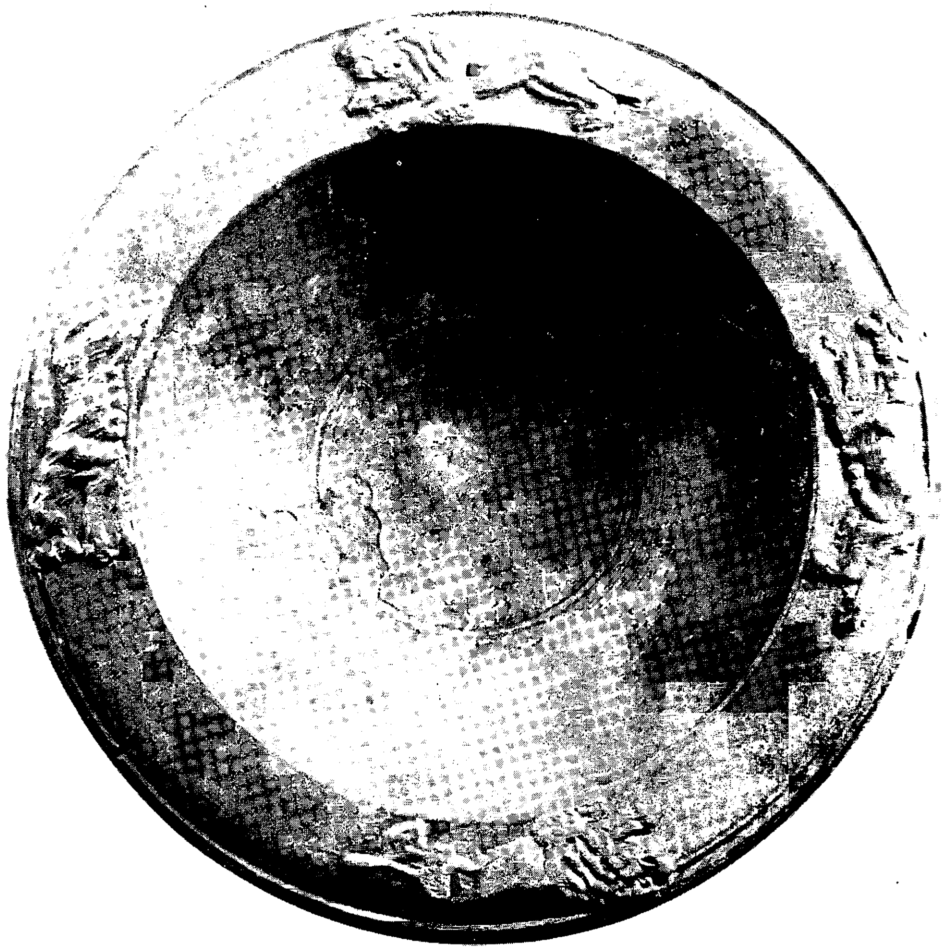
a Form 172.13 Louvre AO6636 H. 15·0



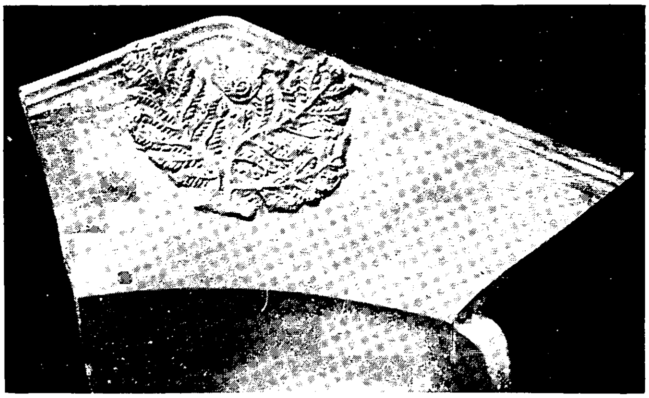
a Form 174.11 Louvre AO6563 H. 21·6



b Form 175.1 Yale 1913.546 H. 15·2

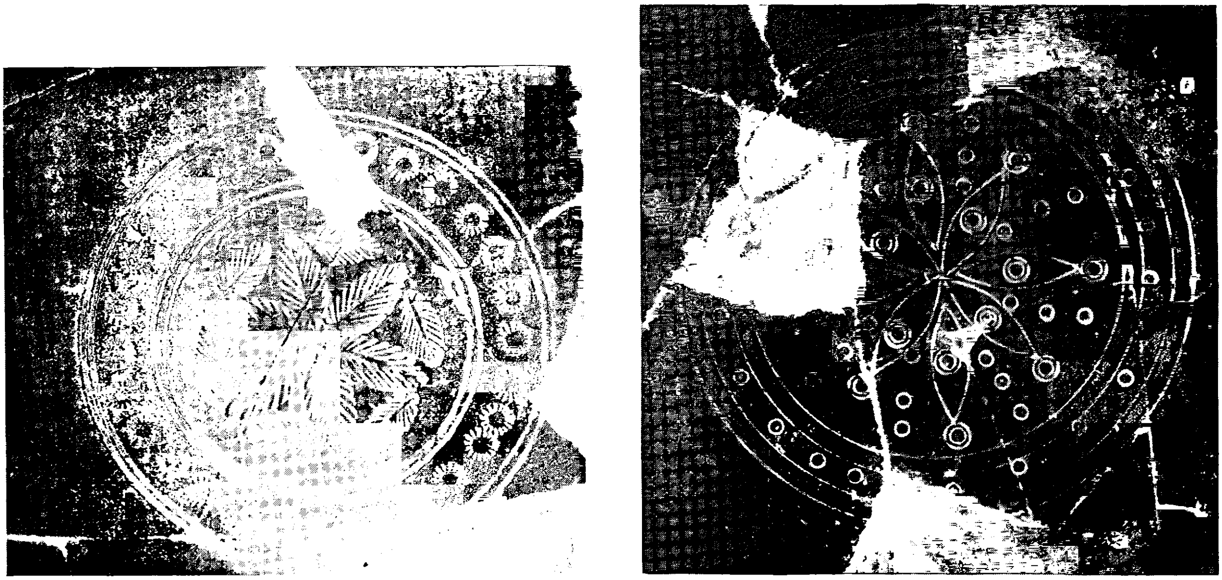


a Form 52.10 Vienna IV 2001 D. 15·0

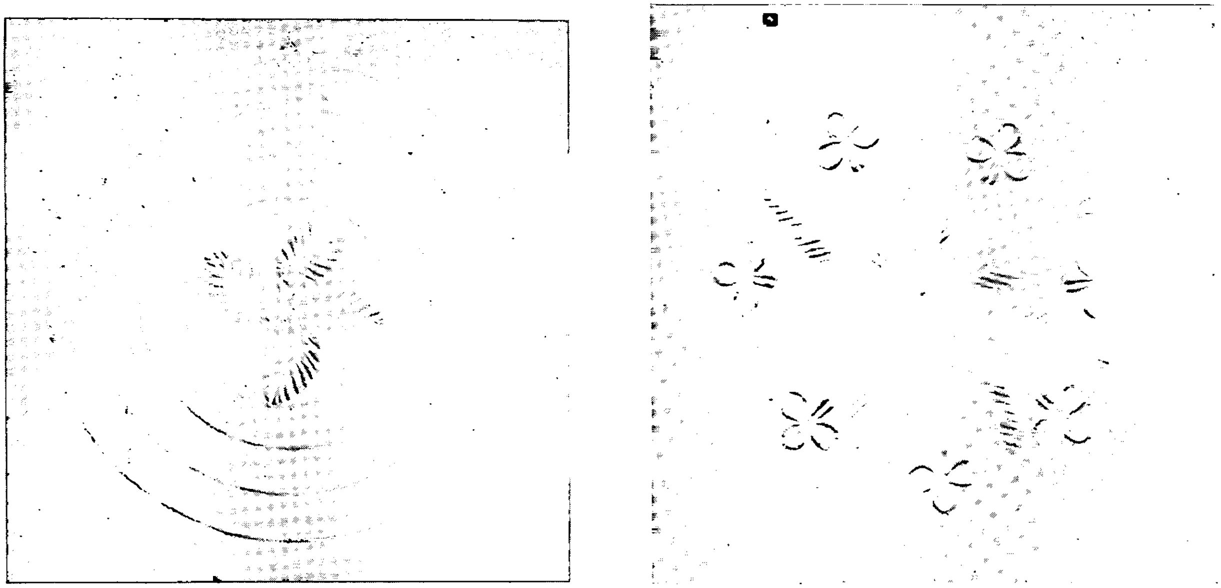


b Form 54.1 Ostia 4675 and 4677 Scale 5 : 9

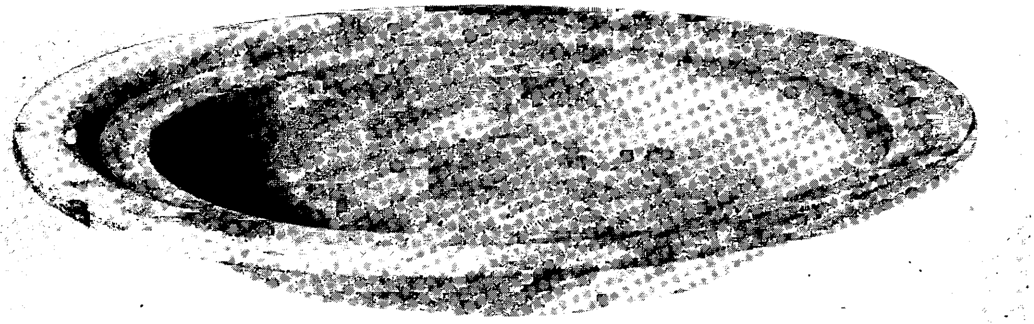
XII AFRICAN RED SLIP WARE: STAMPED, STYLE A(i)–(ii)



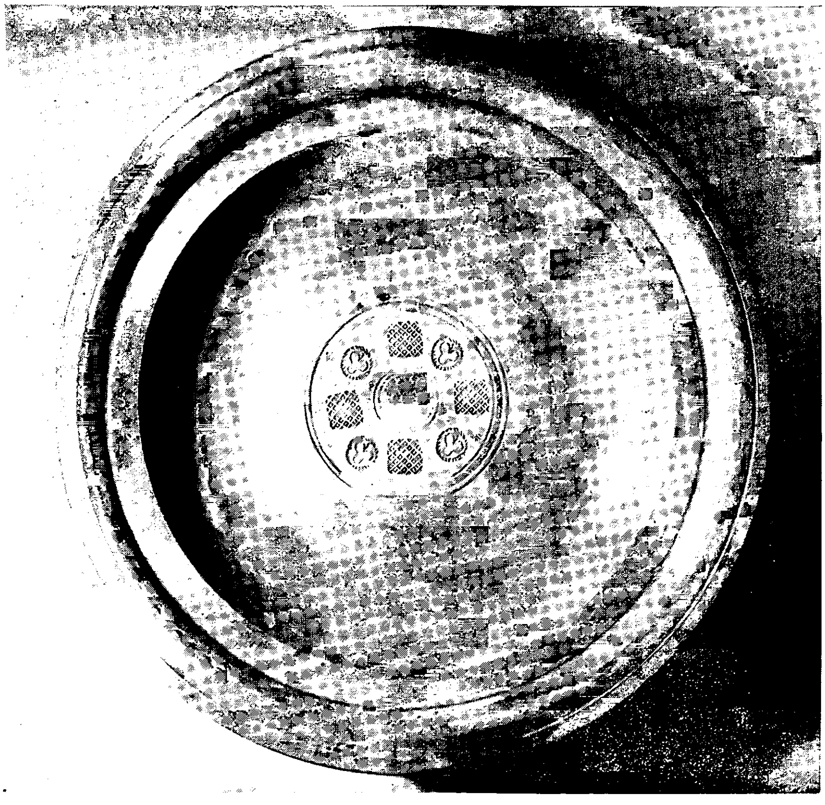
a Form 59.1 (left) and Form 61.1 (right) Germa, Royal Tomb 5 Scales *c.* 3 : 5; *c.* 1 : 2



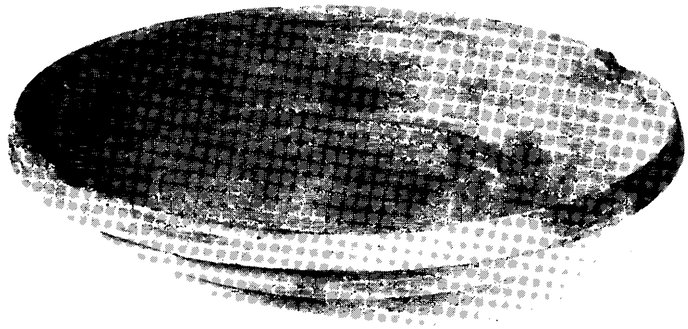
b Form 61.4 (left) and Form 67.1 (right) London Museum P96, P93 Scales 7 : 10; 3 : 5



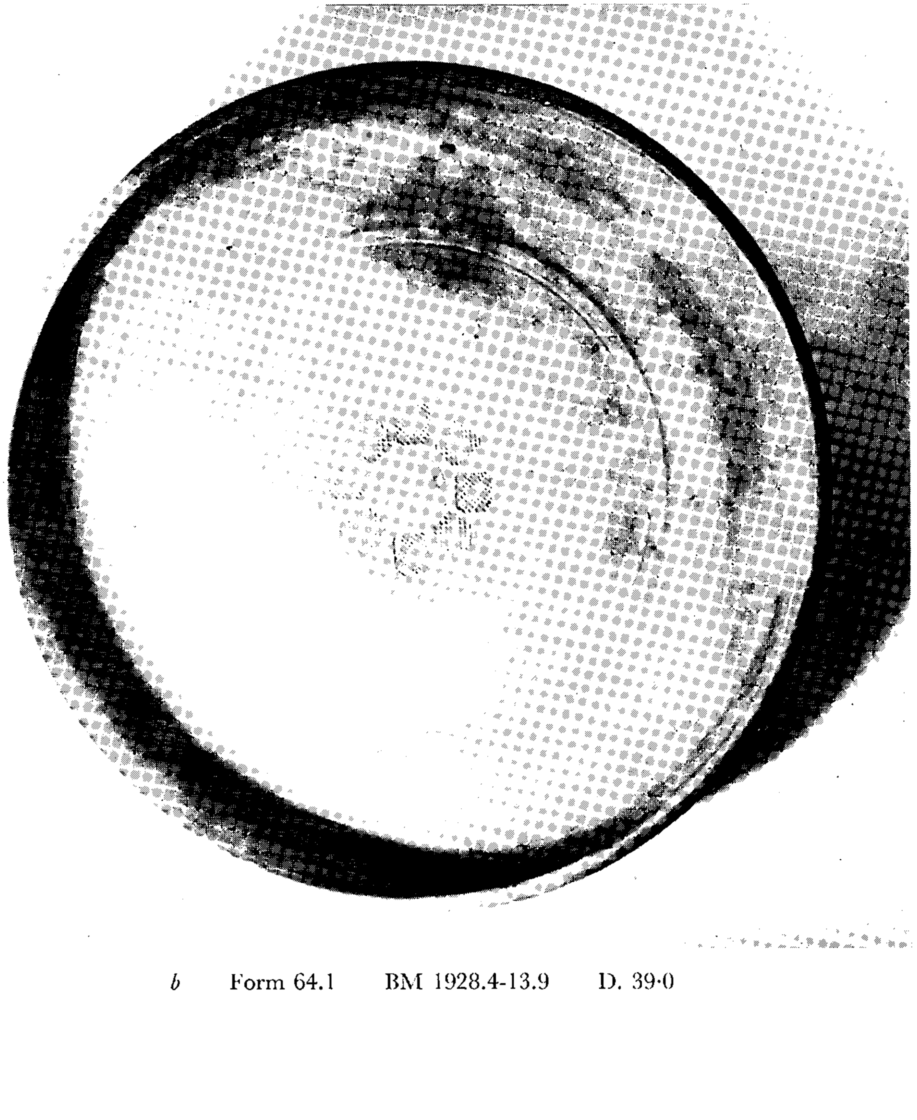
a Form 67.1 London Museum P93 D. 33·1



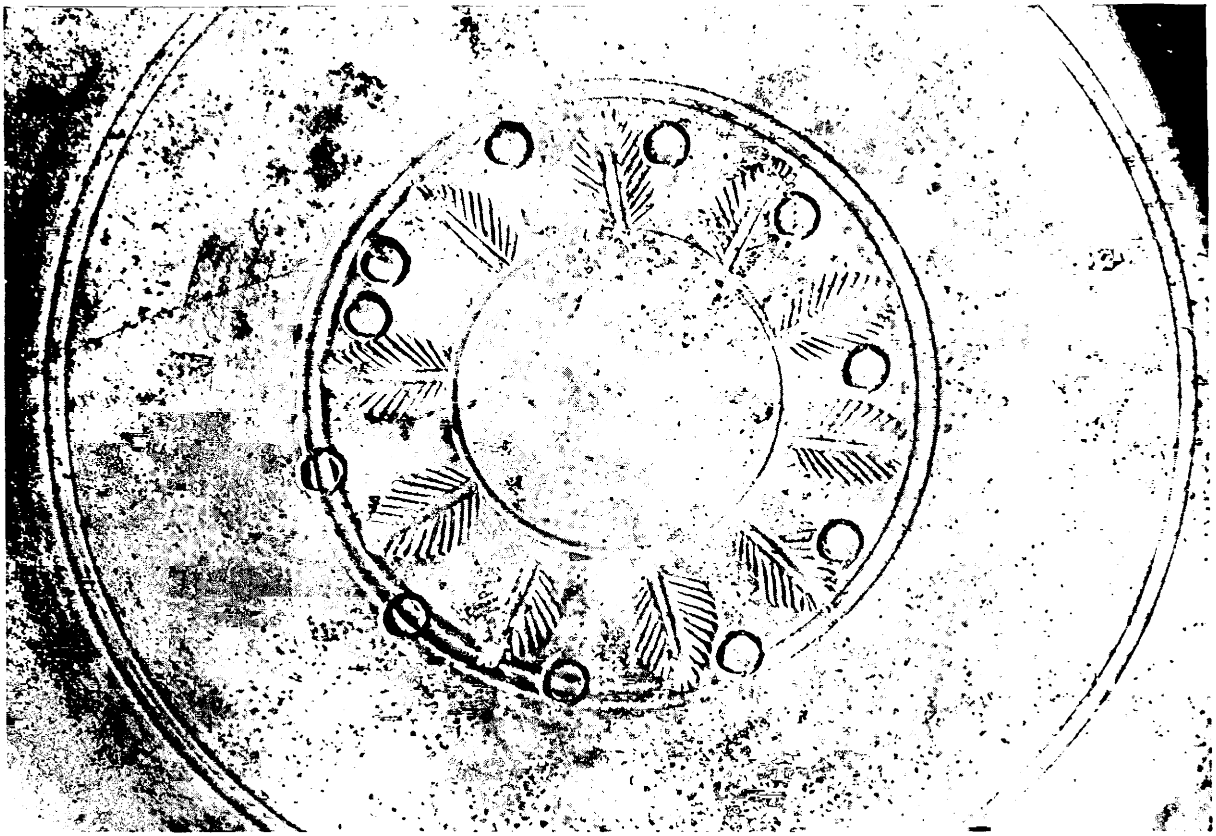
b Form 67.9 BM 1928.4-13.8 D. 41·0



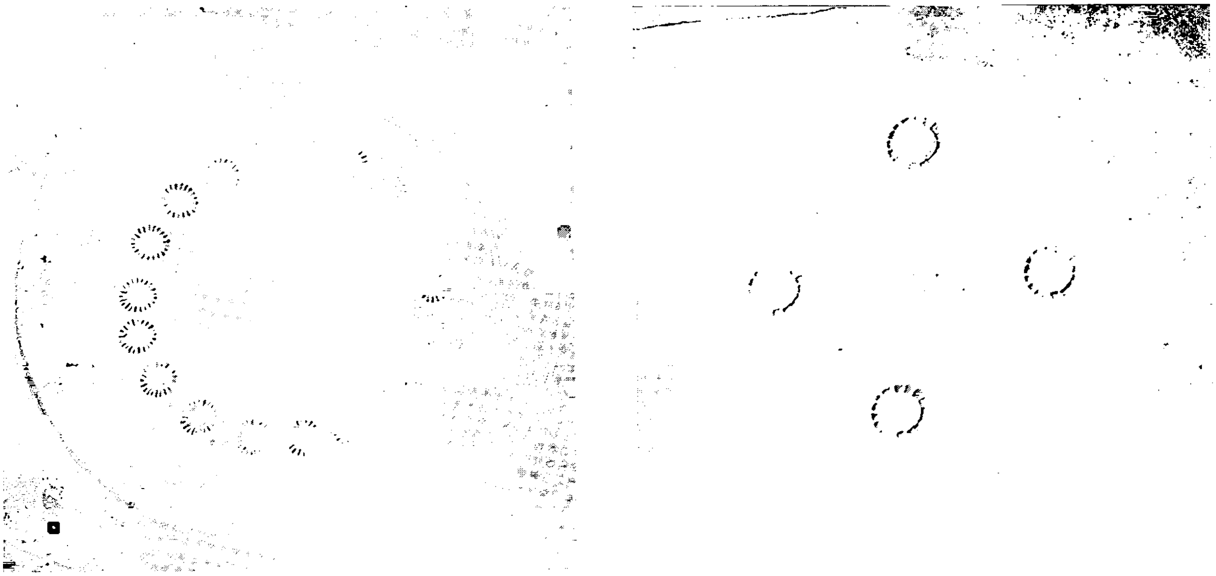
a Form 61.33 London Museum P95 D. 30·8



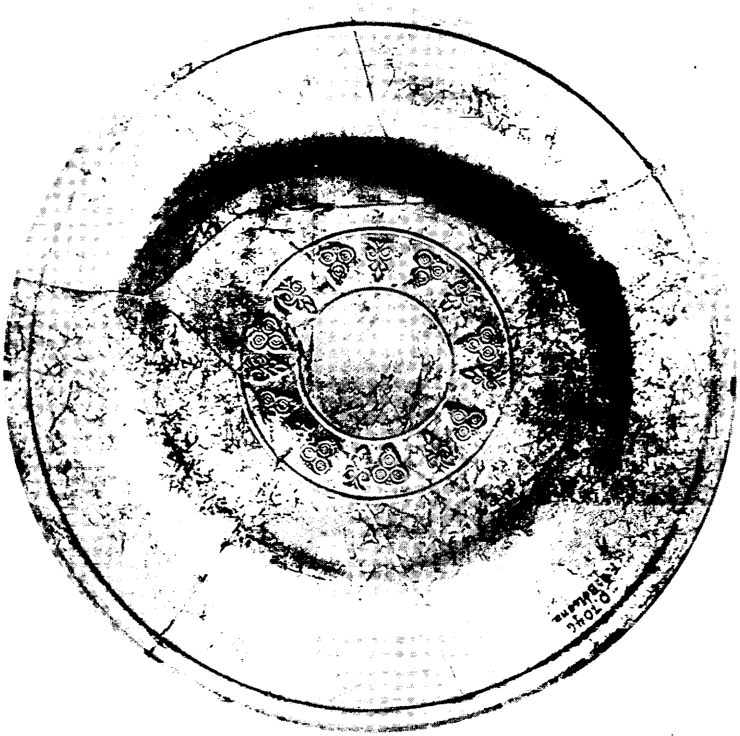
b Form 64.1 BM 1928.4-13.9 D. 39·0



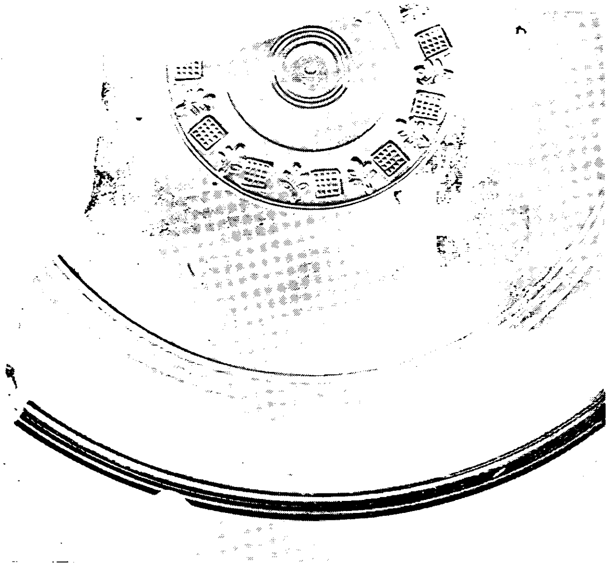
a Form 61.29 Mainz O 13850 Scale 5 : 8



b Form 61.33 (left) and Form 61.35 (right) London Museum P95, P98 Scales 2 : 5; *c.* 2 : 3



a Form 75.1 Mainz O 7046 D. 22·4

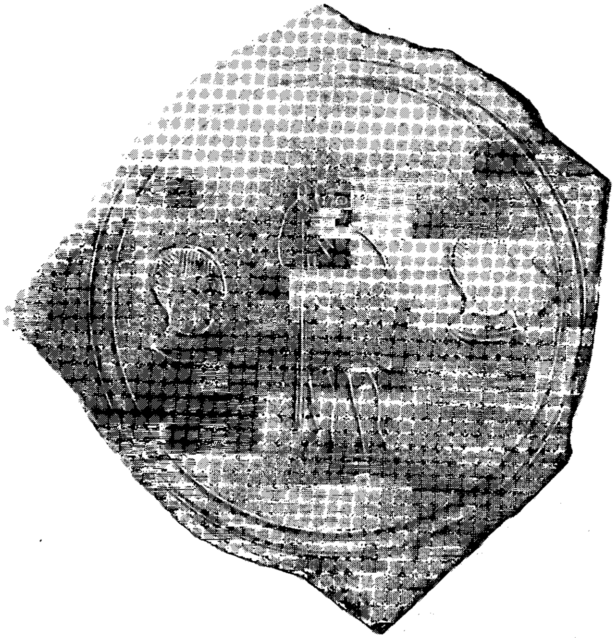


b Form 83.2 Benaki Museum 12436 Scale *c.* 2 : 5

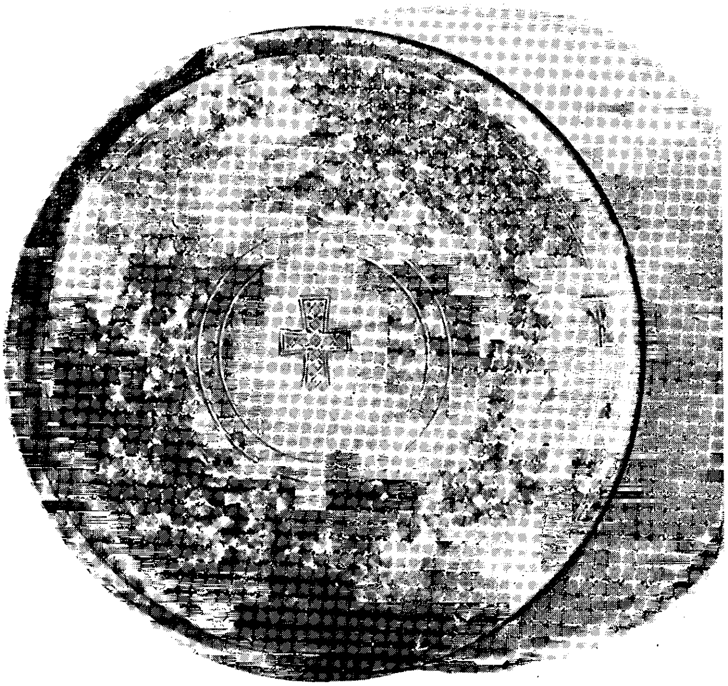
c Form 82.5 Mainz O 9088 Scale 2 : 5

a Form 104.3 Mainz O 13849 D. 39·8

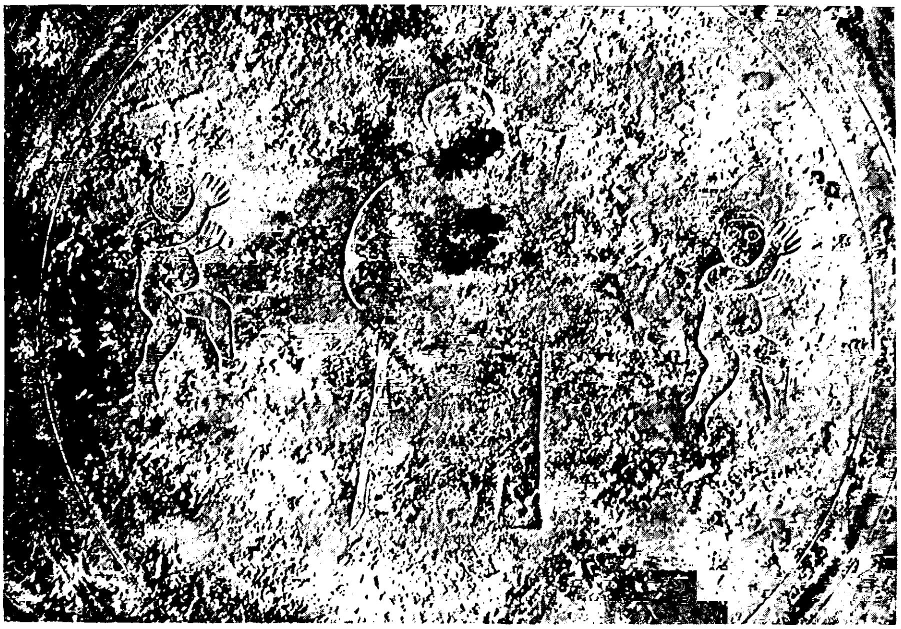
b Form 104.4 Mainz O 9086 Scale *c.* 1 : 2



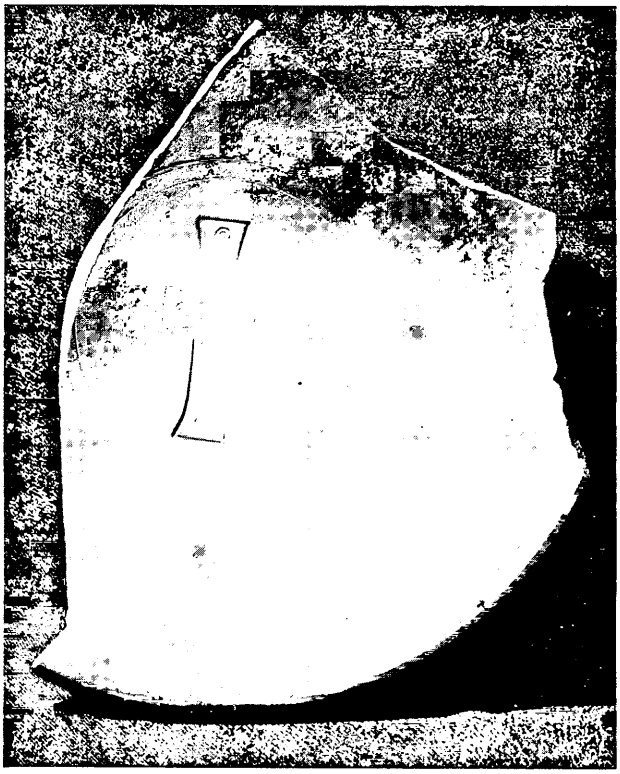
a Form 104 BM 88.10-8.4 Scale *c.* 1 : 3



b Form 104.2 BM 1928.4-13.10 D. 32·8



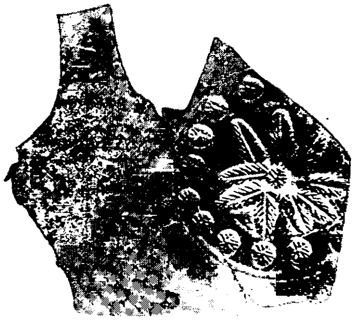
a Form 104 Mainz O 9087 Scale *c*. 2 : 3



b Form 104.16 V & A 476.1891 Scale 3 : 10

Form 170.1 Leiden K 1931/6 28 H. 13·8

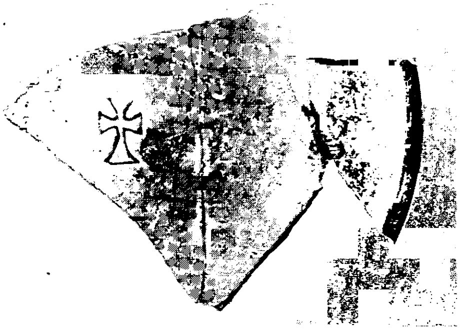
a African lamps, Types IIA & IIB Cambridge, Mus. Class. Arch. Scale *c*. 1 : 2



1 P27047 (Group I)

2 P8646 (Group IIA)

3 P27067 (Group IIA)

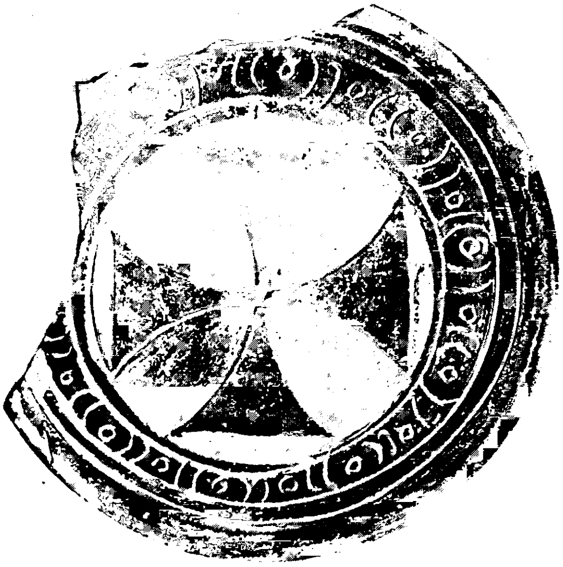


4 P27027 (Group III, early)

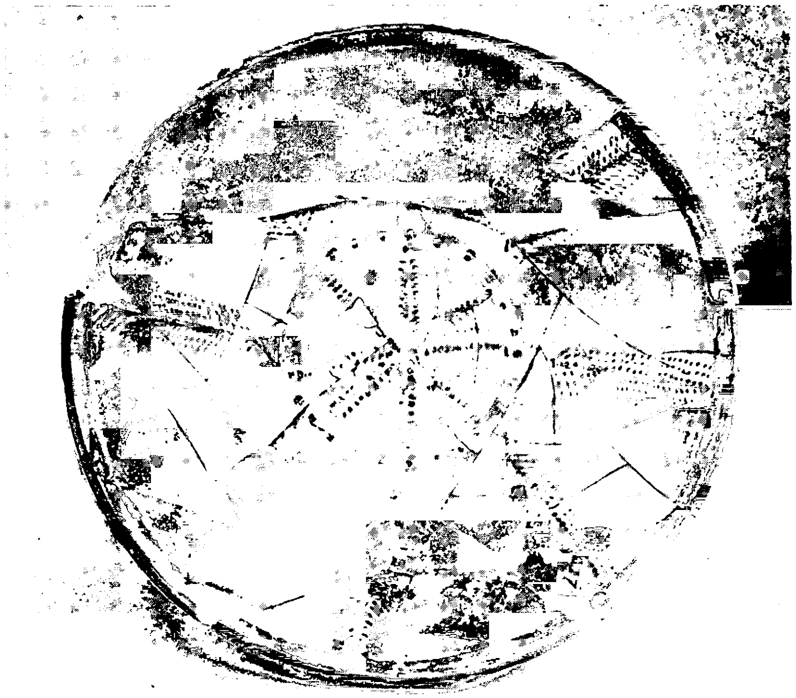
b 'Late Roman C' ware: stamped fragments Athens, Agora Scale 1 : 2 (4: *c*. 1 : 3)

a 'Oinophoros' BM 49·6-20.8 H. 24·3

b Corinthian Relief Bowl BM 1933.6-13.1 D. 12·1



a Plate Asia Minor fabric Sardis Excavations P67.2 (7284)
Scale *c.* 1 : 2



b Central Greek painted ware Plate from Delphi D. 35·5

INDEX OF PLACES AND WARES

NOTE: For locations of individual sites, see Appendix 1 and Maps 37–40.

Abu Mena 1, 119, 123, 128, 131, 133, 141, 144, 147–8, 155, 167, 169, 236, 263, 270, 326, 337–8, 349, 361, 363, 365, 367, 372–6 *passim*, 379, 382, 384–5, 389, 391–7 *passim*, 399–401, 408 [2]n., 410, 413, 420
Adriatic region 416
Adulis 421 n.
Aegean region, 62, 317, 368–70, 385, 408, 417–18, 424
Aeolic Bucchero 405
Africa, personification: 87, 297; province: 6, 286, 297, 386, 423, 426
African *limes* 300
Agora excavations: see under Athens
Aguntum 121, 422
Ain Sinu 419
Aix-en-Provence 173
Akhmim 153
Alahan 400
Albenga 31, 33–4, 38
Albintimilium: see Ventimiglia
Alexandria (finds and museum) 82–7, 131, 137, 147, 159, 200, 235, 243–8, 315, 375, 385, 397, 411 n., 412, 420–1, 423
Algeria 298, 303, 414–15
Algiers 101, 103, 112, 209
Alişar Hüyük 419
Al-Mina 367–8
Alps, regions north of 6
Amman, museum 410
Ampurias 27, 30–1, 42, 44, 49, 51, 66–7, 72, 182, 190, 209–10, 235, 248, 415
Anatolia 414
Ankara, British Institute of Archaeology 167, 271, 400n.
Ann Arbor, University of Michigan 2, 45, 109, 113, 115, 125, 132, 141, 147, 153, 159, 166, 176, 203–7, 231, 239, 256, 263–5, 270–1, 277–8, 385n., 392–6
Antinoopolis 393
Antioch 1, 5, 8, 11 n., 66, 105, 123, 141, 143–4, 147–9, 151, 153, 155–7, 165–7, 169, 171–2, 216, 231, 235–7, 239, 241, 243, 245, 249, 251–3, 261, 263, 265–7, 269–70, 275, 277–9, 281, 318, 335–6, 338–45 *passim*, 349, 351–61 *passim*, 363–8 *passim*, 371, 373–7 *passim*, 382, 385, 397, 399, 401, 419 Daphne: 286
Aphrodisias 167
Apollonia (Cyrenaica) 97, 140, 143, 149, 157, 165–9, 171, 237, 243, 253, 256, 263, 265–7, 269, 359, 367, 377, 381, 391
Apollonia Pontica 350
Apulia 416
Aquileia 77, 82, 313n., 412
Araq el-Emir 116, 243, 410
Arezzo 9–11
Argos 120, 319, 333, 413n.
Argostoli (Greece), museum 336
Argyruntum 190
Aricia 266
Arles 39, 109, 123, 135, 179, 187–8, 274
Armant 88, 229, 231, 243, 245, 251, 257, 274, 277, 385n., 387n., 391–4 *passim*, 396, 413n.
Arretine ware 4, 9–12, 14, 15n., 23n., 414, 425
Arretium: see Arezzo
Arsinoe 392
Ascoli Piceno 167
Asia Minor 10, 316, 323–4, 368, 370, 412, 423; wares: 408–12 *passim*, 418
Aswan 385n., 387, 397, 421
Athens 313n., 317, 369–70, 385, 404–5, 412–13, 417, 426. Agora: 1, 4–6, 8, 39, 45, 53, 55–6, 62–73 *passim*, 78, 80–2, 87n., 93–5, 99–101, 103, 106–9, 112, 115–25 *passim*, 129–36 *passim*, 140, 144, 147–8, 150–1, 153, 155, 163, 165, 167, 169, 178, 199, 215–17 *passim*, 219–22, 229–55 *passim*, 257–70 *passim*, 278, 282n., 300, 311–13, 317–21 *passim*, 326–45 *passim*, 349–68 *passim*, 371n., 373–6, 389, 404n., 405n., 407–8, 410, 417–19. American School: 295n. Benaki Museum: 77–8, 82–91 *passim*, 131, 137, 147, 159, 200, 215–17 *passim*, 229–33, 235, 237 240, 243–51 *passim*, 256–9, 261, 266–75 *passim*, 293, 365. British School: 140, 167, 295n. Kerameikos: 109, 407. National Museum: 70. Various excavations: 61, 163, 407
Athribis 84
Attica 417. Attic wares: 414
Auja Hafir (Nessana) 155, 240, 253, 261, 263, 265, 267, 278, 281, 335, 359, 365, 377, 379, 381, 385, 397, 420
Austria 422
Axum 421
Ayios Philon 382, 385n.

Baelo 77, 79
Balearic Islands 416
Balikesir (Turkey) 411 n.
Balkans 88
Ballana 16n., 129, 131, 137, 139, 395, 397, 413n., 421
Baltimore, museum 282
Banassac ware 11 n.
Barcelona (finds and museum) 23, 30–1, 41–2, 56, 77, 166, 169, 181, 189–90, 208–9, 211, 415n.
Barletta, statue 286
Barrafranca 305, 309
Barumini 25
Beaulieu 56
Beit Alfa 265
Beit Jala 113
Beit Jibrin 94
Beit Nattif 70
Beit Shean 165, 336, 357, 361, 365, 381
Beja 22–3, 115, 128, 180
Belfast, Queen's University 65, 303 ²n., 304n.
Ben Gascir (Tripolitania) 205
Benghazi 176, 421
Berlin, Staatliche Museen 75, 84, 86, 89, 153, 196–7, 287, 411 n.
Bethany 236, 241, 263, 361
Bethel 361
Bir bou Yahia 61
Bir Halima 57
Bizerte 119
Black-glaze wares 8–9, 14
Black Sea region 317, 369, 410, 422
Bled-Maknassy 194, 196, 198
Bodrum 167
Bolsena 124
Bomba 343, 379
Bonn, museum 96, 196
Bordeaux 403–4, 416
Bordighera 39, 41
Boreum 167
Boston, Museum of Fine Arts 19
Bouar Chott 150
Bracara Augusta 415n.
Britain general: 2, 7, 12, 337, 415, 422–3, 425–6. Celtic sites: 7, 337, 422
Brooklyn Museum 413n.
Bucarest, museum 265
Bulla Regia 175, 179, 196
Bu Ngem 305, 308
Burgos, museum 111
Byblos 363
Byzantine wares 173, 370, 418, 424

Cabasse 30, 35, 37
Cadiz, museum 181
Caesarea: see Tralles
Cagliari 22, 42, 47, 75, 404
Cairo, Egyptian Museum 84–5, 88, 90, 129, 137
Calvatone 62
Cambridge Fitzwilliam Museum: 21, 88. Museum of Classical Archaeology: 47, 233, 251
'Campanian' ware 205
Çanakkale 370
Çandarlı 10, 316. Çandarli ware: 8–10, 37, 51, 316–22 *passim*, 323, 325–6, 331, 336, 369, 407, 416–18, 420–3
Cardiff, museum 333
Carnuntum 7, 85, 89–90, 422
Carpi 181–2
Carro 159
Cartagena 176
Carteia 181
Carthage (finds and museum) 2–3, 21–2, 25–7, 29, 33, 44, 47, 52, 61, 63, 76–7, 79, 84, 89, 93, 117, 132, 135, 141, 143, 147, 149–53 *passim*, 156, 161, 176, 178–81, 184, 188, 194, 198–9, 203–5, 207, 210, 240, 247, 249–53, 256–7, 259–63 *passim*, 266–9, 271, 273–9 *passim*, 285–6, 297–8, 310–13, 428
Caubiac, silverware 213n.
Caucana 342, 416n.
Centcelles 208
Cesena, silver dish 281 n., 285, 286
Ceuta 151, 426
Cheikh-Daud 389, 392, 393n.
Cherchel 152, 157–9, 176, 188, 278
Chersonesos 367
Chios, museum 381
Cimiez 34, 56, 70, 141
Clazomenae 357
Concesti, silverware 281 n.
Constantine, museum 66, 88; private collections: 75, 79, 189
Constantinople 286, 369–70, 385, 397, 405, 413, 418, 426. See also Istanbul
Copenhagen, museum 2–3, 19–30 *passim*, 33, 35, 41, 43–4, 51, 53, 55, 62, 70, 94–5, 97, 103, 111, 113, 115, 119, 123, 128, 145, 176, 180–3 *passim*, 187–8, 190, 195, 204
Coptic Red Slip Ware: see Egyptian Red Slip Wares
Coptos 88, 257
Corbridge, silver *lanx* 284
Córdoba, museum 151
Corfu 51–3, 56, 80, 82, 94–5, 97, 99, 106, 201, 229, 233, 235–6, 239–45 *passim*, 279, 327, 331, 355, 361, 368, 370, 408, 417–18
Corinth 1, 11n., 19, 23, 34–5, 37, 39, 45, 53, 67, 71, 73, 81, 108–9, 113, 132, 135, 137n., 143–4, 153, 155, 167, 177n., 195, 229, 233–9, 241, 243, 247–8, 274, 295n., 311, 322, 333–5, 338, 343, 350–1, 353, 357, 361, 363–70 *passim*, 404–5, 408, 417. Corinthian wares: 53, 177, 412
Cornell University (Utica, New York) 47, 52, 76, 117
Corsica 416
Cosa 2, 11n., 35, 42, 48, 51, 59, 135, 143, 153, 199, 208–9, 318, 404, 416
Coto de Doña Ana 115
Cracow, museum 203–4

Crete 365, 385, 408, 418
Cristeşti 407 [2]n.
Cueva de la Pastora 30
Cuneo, museum 185
Cyprus 3, 80, 194, 286n., 368, 371, 383, 385, 397, 399, 400, 419–20, 424. Cypriot wares: 10, 133, 368, 370, 371–86 *passim*, 389, 397, 400–1, 418–24 *passim*, 425–6
Cyrenaica 144, 169, 172, 233, 304, 310n., 317, 345, 368–9, 382, 385, 397, 408, 421–2, 424
Cyrene 55, 70, 176

Dacian sites 405
Dalmatia 297, 416–17
Damascus, museum 70, 86
Danube frontier: 12, 412, 422. Danubian sites: 405. Danubian wares: 402n.
Daphne: see Antioch
Dardanelles 370
Delos 155, 159, 333
Delphi 139–40, 153, 413
Delta: see Nile
Dhenia 185
Dinas Powis 333, 337, 422
Dinogetia 327
Djemila 85–6, 121, 303
Doclea 417
Draguignan, museum 31
Draria el-Achour 29, 34, 39, 41–2, 48, 101, 103, 112, 209
Dura-Europos 1, 6, 61, 63, 67, 69, 72, 290 [2]n., 337 [2]n., 419
Durham, Gulbenkian Museum 365

Eastern Sigillata wares 8–10, 316, 323 [2]n., 423. 'A': 8–10, 419. 'B': 9–10, 177, 417. 'C': 316
Edfu 85, 392, 413n.
Egypt and Egyptian sites 1, 3–6, 80, 84, 86, 88–9, 109, 113, 129, 139, 159, 161, 185n., 205 [2]n., 247–8, 252–3, 257, 259, 266, 297, 310 [2]n., 368, 385–7, 397, 413–14, 420–1, 423–6. Lower Egypt: 368, 397. Upper Egypt: 385 [2]n., 387–8, 396–7, 413, 421
Egyptian Red Slip Wares 2, 173, 372, 385 [2]n., 387–401 *passim*, 413, 419–22, 424
Ehnasya 99, 395, 413 [2]n. See also Hermopolis Magna
El-Abiad 34
El-Aouja 3, 43, 52–3, 61, 65–6, 75–7, 79, 93, 145, 178, 189, 191, 193, 195–7, 297
Elche: see La Alcudia
El-Djem 3, 19, 22–3, 60, 75–6, 81, 86, 145, 176, 178, 181, 183–4, 193–4, 196–7, 200, 204, 210, 297
El Germo (Spain) 151
Emporio (Chios) 1, 163, 167–9, 343–5, 363, 368, 381–3, 385, 418
England 422
Ephesus 10, 88, 137, 248, 342, 365
Eretum region 27, 39, 47, 201, 209
Ethiopia 421, 424
Ezinge 235, 241, 422
Ez-Zib 63

Falerii and region 38
Faras 274, 389, 392–3
Fayoum 132, 149, 399
Festour 103, 175
Fezzan (Libya) 26, 304–5, 315, 415
Florence, museum 27, 45
Floridia 77
Fonte do Milho 97
Formentera 415 n.
France 3, 6; southern: 6, 402–4, 415–16
Francolise 304 [2]n., 416
Frankfurt 80

Gabès 298
Garranes 7
Gat (Ghat) 30
Gaul 1, 8, 12
Gaulish ware (*terra sigilla a*) 8, 11–15, 17, 19, 21, 24–6, 60, 144, 177, 184–5, 193, 283, 289, 293, 299, 316, 323n., 402, 415–16, 422–3. Other wares (mostly late): 3, 6, 288, 402, 405, 415–16. See also T.S. grise
Gelsdorf 7, 196, 199, 422n.
Gemellae region 300
Genova-Pegli, museum 26, 30, 176 189
Germa 19–25 *passim*, 27–33 *passim*, 96, 101, 149, 173, 188, 233, 300, 305, 308, 314, 315n.
Ghirza 304–9 *passim*, 314–15nn.
Gibraltar, Straits of 426
Giorgimpopoli (Tripoli) 196
Giza 132
Glanum 66
Godorf 150, 422
Gonnesa 161
Goritsa 321
Greece 34, 169, 183, 317, 370, 408, 413, 417–19, 421
Gurob 399n.

Hadjeb el-Aioun 194, 197
Haidra 22, 60, 303
Hamrun 71
Harvard University, Fogg Art Museum 186
Heidelberg, museum 84
Heilbronn, casket 285
Henchir el-Amyah 56
Henchir es-Srira 241, 298, 300, 310n., 311
Hermopolis Magna 150, 248, 376, 385n., 398n., 421n. See also Ehnasya
Hierapetra 373–5
Hildesheim, museum 84
Hippo Regius 83, 86, 88, 208

Hoghiz (Rumania) 407n.
Holland 422
Homs (Syria) 86
Hornillos del Camino 111

Iasos 163
Ibiza 30, 34, 181, 189–90
Ilyrat 319, 322
Inkerman 97, 99
Iona 422
Iraklion, museum 100–1, 219
Ischia 34
Islamic wares 173, 424
Istanbul, Arkeoloji Müzeleri: 103, 305, 411n. Ayasofya Museum: 249, 266, 278. Finds: 1, 136, 155, 157, 172, 341–2, 351, 363, 365, 367–8, 383, 408–10, 418. See also Constantinople
Isthmus of Corinth 417
Istros 231, 236, 240, 253, 265, 267, 271, 321, 341, 343, 345, 351–68 *passim*, 410, 422
Italy 3, 6, 8, 9, 11, 183, 190, 296, 313, 318, 412, 416, 423. Italian sites: 24, 26, 191, 304
Italian wares 9, 12, 191, 412, 426; *terra sigillata:* 9–11, 13, 15, 18–19, 21, 26–7, 283, 293, 316, 321, 415, 423; thin-walled, etc.: 9, 179–80, 183; lamps: 177
Itanos 368, 408
Ithaki 248
Izmir 319, 321. See also Smyrna
Iznik (Nicaea) 167

Jebel Qala'n 410
Jerash 395, 410
Jericho 235, 241, 243, 367
Jerusalem 113, 116n., 342, 357, 361, 363, 365, 367, 410n. Palestine Museum: 63, 70, 229, 231, 322n., 373, 375
Jordan 410
Jugoslavia 417

Kairouan region 59, 75, 77, 194, 196–7
Kaiseraugst, silverware 281n., 284
Karanis 2, 107, 109, 113, 115, 125, 141, 144, 147, 153, 159, 163, 166, 231, 239, 256, 265, 270–1, 278, 385, 392–5, 397, 399, 421
Karpathos 70
Kasserine 43, 303
Kenchreai 153, 165–6
Kerch, silverware 285n.
Khirbat al-Karak 165, 261, 271, 335, 343, 345, 351, 357, 359, 365, 367, 375–7, 379, 381–2, 385, 399–401, 420
Khirbat al-Mafjar 420
Khisfine 70
Kilani 71
Klagenfurt, museum 66
Knidos 408, 412
Knossos 51, 317, 319, 321–2, 368, 375, 408n., 417
Köln (finds and museum) 1, 7, 33, 70–1, 73, 96, 99n., 150, 219, 422, 426
Kom el-Ahmar 239, 275
Kom Ishqaw 251
Kornos Cave 381, 383
Kos 351, 355, 367
Ksour es-Saf (Makluba) 23, 44, 51, 53, 70, 94–5, 123, 128, 184, 200, 207, 298
Kyrenia 383

La Alcudia (Elche) 66, 70, 72
Labraunda 331, 351, 353, 367
Lancia (Spain) 12, 415
Lanuvium 80
La Skhira 61, 71, 94, 101, 107–9, 117, 119, 298
'Late Italian' ware 11. See also Italian T.S.
Lechaion 135, 137–9, 153, 161–3, 339–41
Lecourbe 132, 274
Leiden, Rijksmuseum van Oudheden 2–3, 5, 19–27 *passim*, 30, 33, 35, 38, 41, 44, 47, 51, 53, 55, 61, 70–1, 81, 94–5, 97, 99, 103, 105, 111, 113, 115, 119, 123, 128, 143, 175–6, 178–82 *passim*, 184–5, 187–8, 192, 195, 200, 207, 209–10, 229, 243–5, 265, 310–11, 314n., 319, 321, 365
Lemnos 322
Lemta 53
Leningrad, Hermitage 286
Lepcis Magna 23, 33, 47, 91, 100, 103, 108, 111–12, 116–17, 123, 143, 145, 201–3, 208, 229, 233, 236, 239, 304–9 *passim*, 314n.
Les Blais 31
Les Oules 176
Libarna 26, 189
Libya 414–15
Lipari 34, 176, 412n.
Lixus 359, 404
London British Museum: 2, 22, 25–9, 33, 70, 88, 109, 113, 132, 135, 149, 161, 185, 187, 189, 205–7, 240, 252, 257, 265, 267–9, 274, 310, 312n., 389, 394, 396, 398, 412n. Guildhall Museum: 22. Institute of Archaeology: 377, 397 [2]n. London Museum: 2, 27, 41, 94, 97–9, 101, 105–6, 112, 173, 189, 207. Victoria and Albert Museum: 163, 394, 399n.
Louisville, collection 89, 153, 274
Louvre: see under Paris
Lucania 416
Lucinico 412n.
Luni 34
Luxor (Thebes) 285n., 387, 397, 421

Macedonia 405, 413n. Macedonian 'T.S. grise': 405–6, 417
Madrid, museum 77, 79, 137
Mailhac 176

Mainz, Römisch-germanisches Zentralmuseum 2, 33, 35, 41, 55, 88, 105, 115, 124, 127, 129, 139, 153, 161, 176, 203, 236, 239–40, 247–8, 251–4, 257, 259, 263, 266, 269, 275, 310–12, 314–15 [2]nn., 316 [2]n., 389, 392–4, 396, 398
Makluba 97. See also Ksour es-Saf
Malta 73, 93, 233, 314–15, 416
Mambre 219
Mariana 279
Mariemont (Belgium), museum 70, 112, 231
Marseille (finds and museum) 145, 151, 159, 185, 188–9, 192, 263, 277, 279, 402–4, 405n., 415–16
Marzameni 265
Mauretania, personification 87, 297
Mdeina Doga 43, 176, 186
Medamud 239, 241, 251, 275
Medeon 163
Medinet Habu 387n., 389, 391–2
Medinet Madi 147
Memphis 398 [2]n.
Menton, museum 34, 37
Merida 404
Mila 303
Mildenhall, silver treasure 192, 281n., 282, 283n., 285n.
Miletus 315
Mirmeki 321
Monastery of Epiphanius 387, 389, 391–3, 396–7, 413n.
Montmaurin 403
Morocco 11, 97, 229–43 *passim*, 247, 311, 414–15, 422
Moulins, museum 198
Mouzaiaville 85
Munich, Museum für antike Kleinkunst 77, 88
Myrtou 400n.
Mytilene 317, 322
Mzara el-Assile 27

Naples, Museo Nazionale 190
Narbonne, museum 129
Naucratis 252
Naxos 140, 367
Nazareth 235, 239, 365, 367
Nebo, Mount 267, 270
Nessana: see Auja Hafir
Newcastle upon Tyne, museum 43, 96, 101, 167, 172, 233, 343, 379
New York Hispanic Society of America: 185. Metropolitan Museum of Art: 80, 187, 194
Nice, museum 56
Nicosia Cyprus Museum: 71, 80, 185, 363, 381–4, 389, 400n. Finds: 383–5, 400n., 401
Nile, Delta 368, 385–6, 399. Nile valley: 387, 399, 421, 423
Nissan 173
North Africa, finds 2–5, 7, 15, 192, 295, 297, 300, 310, 414–15, 423, 426–7
Northern Provinces 1, 7, 12, 13, 422
Notion 10
Nubia(n) 387, 393, 397, 421, 424

Odessa, collection 71
Olbia 71, 321, 336
Olympia 35, 69–71, 73, 101, 125, 235, 237
Orange 198
Örengeri 266
Orléans 7, 266, 416
Ostia 8, 19, 23, 29, 33, 37–8, 41, 47–9, 59, 61–2, 65, 67, 69, 73, 82–3, 111, 127, 176–7, 181, 184, 186, 189, 208–9, 212, 215–17, 231, 233, 237, 243–5, 248, 318, 412
Osuna 185
Oudna 3, 123, 149–53 *passim*, 155, 221–2, 231, 233, 239–40, 249–53 *passim*, 255–61 *passim*, 270, 274, 277–8, 293, 296, 298, 310n.
Oxford 33, 38
Oxyrhyncus 89, 229, 243–5, 265

Palatiano (Greece) 322
Palestine 368, 382, 385, 399, 420, 424
Palestinian wares 399, 410–11, 413, 420
Panarea 34
Pannonian bronzes 90, 284; lamps: 310–13
Panticapaeum 362
Paphos 379, 384, 385n.
Paris, Musée du Louvre 2, 21, 23, 27, 30, 37, 43, 56, 59, 61, 66, 70, 75–7, 82, 132, 157–9, 176, 178, 183, 185, 192–7 *passim*, 203–4, 229, 236, 245, 253, 257–60, 266, 269, 271–8 *passim*, 303, 350, 355, 357, 362–3, 365–7. Private collection: 149
Pavia 259
Pergamon (finds) 10, 316–17, 319, 321–2, 365, 367, 369–70, 408 [2]n., 412, 417
Pergamon wares 8–10, 316–17, 412. See also Çandarli ware
'Pergamene ware': see Eastern Sigillata 'A' ware
Petra 113, 420
Peyia 382–3
Pheradi Maius 298
Philadelphia, University Museum 245, 257
Pianopoli 153
Piazza Armerina 167, 199
Pitane (Çandarlı) 316
Po valley 416
Polis 412
Pollentia (Majorca) 42, 178–9, 189, 415n.
Pollenzo 185
Pompeii 10, 44, 186–7, 190, 205, 207, 425
'Pompeian Red' ware 18, 201
Pontus 410. 'Pontic' wares: 317
Porto Rafti 167, 343
Porto Torres 183n.
Portugal 415
Predjama 99, 123

Qallilia 53
Qasr Ibrim 393–4, 397
Qrendi 91, 93, 314n.
Qustul 397

Rabat (Malta), finds and museum 18, 26, 33, 35, 42, 48, 53, 61, 70, 76, 91, 94, 127, 179–80, 185, 315n.
Ragusa 313, 314–15nn.
Ramat Raḥel 237, 241, 351, 359, 362, 367, 381–2, 408 [2]n.
Raqqada 43–4, 52, 191, 298
Ras el-Hilal 397, 422
Ravenna 287
Recklinghausen, museum 159
Rhenish wares 413
Rhineland 3, 12
Rhodes 70, 194, 198
Rhone valley, 402, 415
Richborough, casket 285
Risley, silver *lanx* 284
Romano-British wares 323n., 422
Rome finds: 3, 13, 19, 34, 42, 48–9, 51, 63, 66, 80, 82, 89, 176, 201, 208, 215–16, 312n., 314, 412n., 416, 426. American Academy: 49, 71, 111, 121, 125–8, 143, 148, 208–9, 318n. Antiquarium Comunale: 80. British School: 27, 31, 34, 38–9, 42, 45, 47–8, 53, 55–6, 60, 69, 111, 127, 201, 209, 288n., 416n. Lateran Museum: 284. Museo Africano (Coloniale): 23, 30, 188. Museo Nazionale delle Terme: 80. Various collections: 35, 55, 89n., 127, 256, 266
Rumania, finds 407

Sabratha 2, 13n., 38, 51, 53–55, 80, 83, 94, 103, 117–19, 125, 203n., 304–5, 310, 315n., 412
Saguntum 9, 137
St.-Bertrand-de-Comminges 404
St.-Blaise 131, 141, 151, 219, 236–7, 240–1, 249, 273, 275, 277, 313n., 403, 415
St.-Chamas 145
St.-Rémy, museum 66, 141, 151
Salamis 376–7, 381–2, 385n.
Salona 129, 417
Saloniki (Thessalonica) 62, 71, 120, 143, 179, 183n., 196, 317, 326–7, 331, 335, 369–70, 373, 385, 405–8, 413, 417–18.
Samaria 8, 263, 318, 322, 373, 420
Sami 153, 167, 336
'Samian' ware 4, 8, 9, 387. See also (1) Eastern Sigillata 'B' ware, (2) Gaulish wares. 'Samian' cream ware: 397. 'Samian' red ware: 387
Samos 4, 9, 317, 335, 363
Sant Antoni 34, 189, 198, 209
Sardinia 3, 416
Sardis 336–7, 351, 355, 359, 363, 370, 409–10
Sassari, museum 25–6, 30, 44, 47, 61, 173, 188
Sbeitla 23, 43, 63, 65, 117, 129, 188, 298, 303–4
Schaan 106, 231, 235–6, 239, 241, 422
Scotland 422
Sebha, museum 19, 22, 23, 25, 27, 29, 33, 149, 173, 300n., 305, 308, 415n.
Seleucia: see Silifke
Sétif 23, 30, 42, 83, 94, 119–21, 125, 149, 173, 303
Sfax 27, 35, 99, 117, 185, 298
Sicily and Sicilian sites 304, 314n., 315, 368, 413, 416
Sidi Aïch 296, 298, 300, 303
Sidi Daoud 19, 21–4, 29–30, 33, 44, 51, 53, 66, 70, 103, 113, 115, 119, 128
Sidi el-Hani 21, 70
Sidi Ferruch 70, 112
Siggiewi 91, 94
Silet edh-Dhahr 333, 375
Silifke 271, 419n.
Siyar el-Ghanem 249
Smyrna 183n., 362, 367. See also Izmir
Sofiana 267
Soli 5, 419
Sortino 152
Sousse 30, 33, 41, 59, 63, 66, 75–6, 86, 105, 175–6, 178, 192, 194–9 *passim*, 201–4 *passim*, 274, 412
South Etruria, site survey 48, 288, 416. See also under Rome, British School
South Gaulish ware (T.S.) 11, 19, 24, 34, 177, 283, 402, 415
South Russia 3, 317, 368, 412
Spain 6, 11–12, 34, 402, 404, 414–15, 422–3, 426
Spanish T.S. 11–12, 415, 423
Sparta 35, 37, 59, 61–2, 93, 318
Sperlonga 160, 249, 266
Spezia 34
Sphagion 33
Split 417
Stuma, silver paten 173
Sucidava 336, 343, 345, 407n.
Sutri 178, 191n.
Sutton Hoo, silverware 16n., 282
Svilengrad 319
Switzerland 422
Syracuse, finds and museum 30, 34, 42, 61, 199, 267, 367, 416n.
Syria 3, 8, 368, 385, 419, 424

Tabbat al-Hammām 357, 361
Tabgha 165
Ta' Ġawhar 70
Tajura 308, 314n.
Tamuda (Tetuán) 79
Tanais 336
Taranto, museum 416
Tarragona 42–4, 51, 94, 105, 127, 166, 176, 201, 243, 415n.

Tarsus 6, 71, 199, 231, 235–7, 243, 247–9, 269, 274, 281, 351, 353, 357, 363, 365, 367–8, 376, 385, 419
Tas-Silg 260
Tebessa 189
Telergma 79
Tell en-Naṣbeh 362
Tell Fakhariyah 89, 361, 365, 367–8, 419.
Tell Qasile 353, 376
Terenuthis 236
Terra Sigillata 8–11, 13–15, 33, 211, 289–90, 293–4, 297, 316–17, 323, 369, 416, 423, 426. TS chiara B: 6, 288, 402–3, 415–16. TS grise: 4, 8, 285, 347, 402–7 *passim*, 415–17, 423, 426. TS lucente: 6, 326n., 402, 415
Thapsus 2, 60, 195
Tharros 22–3, 26–9, 42, 51
Thasos 88
Thebes: see Luxor
Thelepte 75, 303
Thera 94
Thessaly 413n.
Tiddis 66, 86, 88, 296, 303
Tika 304, 421
Timetlas 79
Timgad 88
Tintagel 7, 367, 422
Tipasa 15n., 22–5, 27, 29–30, 33–4, 47, 103, 127, 139, 148, 161, 163, 239, 297, 415n.
Tiritaka 333, 359, 363, 365, 367, 412n.
Tocra 123, 136, 140, 143, 156–7, 166, 169–73 *passim*, 237, 241, 304–5, 309, 336, 343, 345, 379, 391, 408, 421
Todi 42
Tolmeita 31, 109, 155, 237, 241, 408, 421
Torino, museum 22–3, 34, 39, 42
Toronto, Royal Ontario Museum 8n., 19, 62, 94, 176, 190, 210, 313, 392–3, 395, 413n.
Torre Annunziata 187
Torre del Mal Paso 105
Torre Iacova 186
Torrox 89
Tralles 9–10
Traprain Law (Scotland), silverware 192, 282–3nn.
Trier 49, 59, 194, 422n.
Tripoli, finds and museum 38, 43, 45, 47, 52–5, 71, 81, 117, 120, 123, 176, 186, 196, 200–1, 205, 209, 304, 308, 310, 315n.
Tripolitania 200, 203, 298, 303–5, 315, 414–15
Tripolitanian Red Slip Ware 298, 304–9 *passim*, 314, 323, 415–16, 421. Lamps: 93, 304, 314–15
Troad 370n.
Troy 103
Tunis, Bardo 2–3, 21–2, 43, 51–3, 57, 60–3, 65–7, 71, 75–7, 79, 81, 86, 93–4, 101, 107–8, 119–21, 123, 133, 141, 143, 145, 147, 149–53 *passim*, 156, 175–6, 178–9, 183–4, 189, 191, 193–8 *passim*, 201, 233, 240–1, 247, 249, 253, 257, 259–60, 263, 267, 270, 274–9 *passim*
Tunisia and Tunisian sites 3–4, 6, 19, 21, 22, 33, 61, 119, 145, 178, 180–3 *passim*, 186, 193, 195–6, 203–4, 209, 215–17 *passim*, 296–300 *passim*, 303–4, 310, 315, 403, 414–15, 428–9
Turkey 400, 419
Tyndarus (Sicily) 286n.

University of Michigan: see Ann Arbor
Upper Egypt: see under Egypt
Uthina: see Oudna

Vado 136, 189–90
Valence 43, 56n., 213n.
Valencia 30, 38, 45, 57, 101, 105, 143, 190
Valletta, National Museum 70–1, 91, 314n.
Vassallaggi 314n.
Vatican Museum 19, 22, 29, 34, 67, 105, 176, 201, 235, 279, 287, 412n.
Veii and region 31, 34, 38–9, 42, 45, 53–6, 60, 69, 111, 127
Vendres, Coll. Mouret 231, 235–6, 243, 402–3, 415
Ventimiglia 6–7, 22–5, 29–30, 33–5, 37, 39, 41–4, 47–8, 51, 56–7, 97, 103, 109, 113, 116, 127, 143, 148, 152–3, 176, 182, 208–10, 219, 229, 235, 241, 296, 326, 416
Vienna Kunsthistorisches Museum: 21, 42, 77, 137, 209, 260, 279, 342. University collection: 365
Vila Fernando 103
Virinum 6n., 7, 39, 66, 422
Višići 34, 297, 416–17
'Visigothic' ware 4, 402, 404
Volos (Greece), museum 321, 336
Vulci 34

Wadi el-Arab 393
Wales, S. 422
Washington, D.C. 179
West Tunisian wares 303
Wiesbaden, silver bowl 213n.
Worcester (Mass.), museum 286n.

Xanthos, Letoon 140, 322, 375, 377–81, 385, 418

Yale University 19, 63, 67, 69, 176–7, 194, 198, 395n.
Yassı Ada 167, 169

Zejtun 70